

20040124.qrp v03_n175.qrl.20040124

Date: Sat, 24 Jan 2004 19:03:07 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 3175

QRP-L Digest 3175

Topics covered in this issue include:

- 1) [166119] Congratulations, N8IE !!!
by "Lawrence Makoski" <Makos327@worldnet.att.net>
- 2) [166120] Re: For CW Buffs
by "Lee Hopper" <leehopp@msn.com>
- 3) [166121] Re: Black case for BLT
by "Lee Hopper" <leehopp@msn.com>
- 4) [166122] Results of this months RFTB
by "Jerry Ford" <benlightnd13@mchsi.com>
- 5) [166123] Question on antenna fields...
by Ed Tanton <n4xy@earthlink.net>
- 6) [166124] Re: End and Center Fed Dipoles
by Karl Larsen <k5di@zianet.com>
- 7) [166125] Re: Warren Gregoire Head Phones
by Bob Nielsen <nielsen@oz.net>
- 8) [166126] Re: Congratulations, N8IE !!!
by "Brian Murrey" <brian@iquest.net>
- 9) [166127] RE: Question on antenna fields...
by "Hare,Ed, W1RFI" <w1rfi@arrl.org>
- 10) [166128] Code Practice Software
by Jim Campbell <jim-c@charter.net>
- 11) [166129] GLB Channelizer found (in Quantity!)
by "W. Keith Hibbert" <wkhibbert@frontiernet.net>
- 12) [166130] RE: Question on antenna fields...
by "Nick Kennedy" <wa5bdu@tcainet.net>
- 13) [166131] Re: Question on antenna fields...
by Karl Larsen <k5di@zianet.com>
- 14) [166132] Re: End and Center Fed Dipoles
by <w9ya@arrl.net>
- 15) [166133] rock mite 20 straight key
by Nightowls627@aol.com
- 16) [166134] Light Weight Paddles
by "Brent Sutphin WB4X" <bsutphin@triad.rr.com>
- 17) [166135] Re: Question on antenna fields...
by "James R. Duffey" <JamesDuffey@comcast.net>
- 18) [166136] Re: Question on antenna fields...
by <w9ya@arrl.net>
- 19) [166137] Re: rock mite 20 straight key

- by "Mike WA8BXN" <hubby2k@hotmail.com>
- 20) [166138] Re: Code Practice Software
by Nick Yokanovich <k3ny@cablespeed.com>
- 21) [166139] Re: Antenna fields
by Ed Tanton <n4xy@earthlink.net>
- 22) [166140] Re: THE K2 AND AIRPLANE BUFFS
by Bruce Grubbs <mail@brucegrubbs.com>
- 23) [166141] Possible AT in PA on Saturday
by "Ron Polityka" <wb3aal@verizon.net>
- 24) [166142] Re: Code Practice Software
by WJuergens@t-online.de (Wolf-Ruediger Juergens)
- 25) [166143] FOX: KROU preliminary log
by Tim Groat <tcgroat@earthlink.net>
- 26) [166144] Re: Congratulations, N8IE !!!
by "Trevor Jacobs" <kg6cyn@softhome.net>
- 27) [166145] RE: THE K2 AND AIRPLANE BUFFS
by "Jim Sheldon" <w0eb@cox.net>
- 28) [166146] Re: Elmer 160: Lesson 7--Assignment 2
by "John J. McDonough" <wb8rcr@arrl.net>
- 29) [166147] WTB: OHR Sprint 40M or 30M
by "Alan Fryer" <N3BJ@hotmail.com>
- 30) [166148] Spooky Atomic Clock
by "Ron Polityka" <wb3aal@verizon.net>
- 31) [166149] rock mite 20
by Nightowls627@aol.com
- 32) [166150] Re: THE K2 AND AIRPLANE BUFFS
by Bruce Muscolino <w6toy@erols.com>
- 33) [166151] Re: For CW Buffs
by ultrafixedwing@juno.com
- 34) [166152] Re: American QRP Club announces Forum Schedule for 2004
by "Doc - W5TB" <w5tb@arrl.net>
- 35) [166153] Sunday Morning SSB/CW QRP Net
by "Ken La Rose" <kenlar@csolve.net>
- 36) [166154] Re: Isotron Antennas
by Bruce Muscolino <w6toy@erols.com>
- 37) [166155] Re: rock mite 20
by Nelson Winter <thenels@go.com>
- 38) [166156] ARRL VHF Sweepstakes TODAY
by "Mark S. Adams" <msadams@buffalo.edu>
- 39) [166157] AZScQRPions Paddles # 451
by "Paul J Mackanos, Jr." <paul@prohomeinspector.net>
- 40) [166158] Re: Possible AT in PA on Saturday
by "Ron Polityka" <wb3aal@verizon.net>
- 41) [166159] Atomic Clock
by "Paul J Mackanos, Jr." <paul@prohomeinspector.net>
- 42) [166160] Re: AZScQRPions Paddles # 451
by "Mike WA8BXN" <hubby2k@hotmail.com>
- 43) [166161] RE: AZScQRPions Paddles # 451

by "JBCrafts" <jbcraft@adelphia.net>
44) [166162] Re: Atomic Clock
by John Oppenheimer <john@KN5L.net>
45) [166163] RE: AmQRP "PIC-EL Kits" ship today!
by "Dave @ Interaccess.com" <dleonard@interaccess.com>
46) [166164] WWVB, history of
by John Oppenheimer <john@KN5L.net>
47) [166165] Re: For CW Buffs
by Steve Smith <sigcom@juno.com>
48) [166166] Re: For CW Buffs
by <bill@n4qa.com>
49) [166167] Re: For CW Buffs
by John Sielke <jsielke@pobox.com>
50) [166168] Trade: Sierra for a KX1
by "AD4MZ Bob C" <ellyncooley@earthlink.net>
51) [166169] Re: AZScQRPions Paddles # 451
by "E. Roswell" <eroswell@monmouth.com>
52) [166170] Iraq on the air!!!
by PMdc361@aol.com
53) [166171] Re: For CW Buffs
by "John Harper AE5X" <john@ae5x.com>
54) [166172] Need help w/ paddle ID
by Al Scanandoah <k2zn@rochester.rr.com>
55) [166173] Fox - Fox Hunt Team Results.
by "ratray" <ratray@accesscomm.ca>
56) [166174] RE: Iraq on the air!!!
by "Emmersome Bigguns" <n8ie@woh.rr.com>
57) [166175] Re: Iraq on the air!!!
by Karl Larsen <k5di@zianet.com>
58) [166176] Wanted: W7EL Optimized Transceiver
by "Alan Fryer" <N3BJ@hotmail.com>
59) [166177] Have a SDR1000 you don't want anymore?
by <ah7i@atl.org>
60) [166178] Re: Have a SDR1000 you don't want anymore?
by <ah7i@atl.org>
61) [166179] IF amp xtal filters
by "Rich Johnson" <rjohnson390@comcast.net>
62) [166180] Re: IF amp xtal filters
by Ed Tanton <n4xy@earthlink.net>
63) [166181] WTB: Red Hot 20 or 40
by "Tim Kass" <timkass@hotmail.com>
64) [166182] Completed SSB rig pix
by "AI2Q" <ai2q@adelphia.net>
65) [166183] Re: IF amp xtal filters
by "James R. Duffey" <JamesDuffey@comcast.net>
66) [166184] CQ WW 160M
by John Sielke <jsielke@pobox.com>
67) [166185] Re: Need help w/ paddle ID

by Peter Burbank <peterlee@qx.net>
68) [166186] Re: Need help w/ paddle ID
by "Tony Martin W4FOA" <w4foa@comcast.net>
69) [166187] Re: IF amp xtal filters
by "George, W5YR" <w5yr@att.net>
70) [166188] Re: Isotron Antennas
by "Dave Martin" <k2zu@seanet.com>
71) [166189] For Sale LDG QRP tuner
by Jeff <fantbb@yahoo.com>

Date: Fri, 23 Jan 2004 18:53:52 -0500
From: "Lawrence Makoski" <Makos327@worldnet.att.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>,
"Flying Pigs" <fpqrp-l@fpqrp.com>
Subject: [166119] Congratulations, N8IE !!!
Message-ID: <012a01c3e20c\$2a5982a0\$fffd4b0c@larrysahyqy001>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

If anyone posted this before, I apologize for my redundancy!

I was leafing through my January issue of CQ while eating lunch today at work. I came across the scores for the 2003 CQ WW WPX SSB Contest.

Dan, N8IE was the top QRP/p operator in the USA and finished in the top 10 worldwide !!!

Way to go, Dan !!!
73 de Larry W2LJ - Vivat Morse!

W2LJ@arrl.net
<http://www.qsl.net/w2lj>

ARRL Lifemember QRP ARCI #4488 NJQRP #47
FISTS #1469 QRP-L #778 FP #612 QRPp-I #759
ARS #1528 --- K1 #1647 --- AmQRP, CQC #746

Date: Fri, 23 Jan 2004 15:59:59 -0800
From: "Lee Hopper" <leehopp@msn.com>
To: <n3drk@triad.rr.com>,

"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [166120] Re: For CW Buffs
Message-ID: <BAY4-DAV1553JmxjUgw0001090b@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Great site - thanks for posting it, John. Here's a short quote from Jason:

..I started getting QSL cards! I had never received mail of any kind, other than an occasional birthday card and those little postcards the dentists send out to you reminding you to brush your teeth. It was very exiting for me.

:)

73 -
Lee Hopper, NB7F

n3drk wrote in part:
> ...Look what this little guy has done...

Date: Fri, 23 Jan 2004 16:16:34 -0800
From: "Lee Hopper" <leehopp@msn.com>
To: <kc8aon@juno.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [166121] Re: Black case for BLT
Message-ID: <BAY4-DAV810h8s4KWiG0002e498@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Rick and all -

I asked the guys at the truck bed liner shop about spraying a radio case with bedliner and they said sure, we already have another guy that brings in 4 or 5 at a time!

I've never actually done it, but I think this would be a super durable, scratch-proof coating.

73 -

Lee Hopper, NB7F

Rick McKee said:

> ...painting the case of their Norcal BLT...

Date: Fri, 23 Jan 2004 17:52:36 -0600
From: "Jerry Ford" <benlightnd13@mchsi.com>
To: "FPigs" <fpqrp-1@mpna.com>,
"Elecrafft@mailman.qth.net" <elecrafft@mailman.qth.net>
Cc: "qrp-1" <qrp-1@lehigh.edu>, "FSQRP" <4sqrp@mailman.qth.net>
Subject: [166122] Results of this months RFTB
Message-ID: <000701c3e20b\$fb4ab240\$4a78da0c@mchsi.com>

OK folks: Here is the official results of the " Run For The
Bacon " sprint held last weekend.

Thanks to everyone for participating and making this yet another fun
event. I hope you enjoy the soapbox that follows.

Congratulations are in order for Jim (W0EB) for the big win and to
Doc and Lloyd for some excellent scores.

Remember, this will be a monthly event held on the 3rd Sunday evening
of each month. I hope all you will join us in the next running.
Thank again to all

73 es oo Jerry N0JRN

W0EB, Jim Sheldon, 3 Watts, fpqso=33 fpdxqso=0 nonfpqso=3 spc=28
total=2856

20 died after 2 QSO's and ran out of those I could hear that I hadn't
already worked on 40 about 0145 UTC and then a few more popped in
after 0200. Tried 80 about 0150, but didn't hear anyone. Looked again
at 0220 and grabbed some more piggies. 80 was in real good shape even
to the East Coast - Got W2AGN in NJ on 40 AND 80. Went back to 40 and
the band sounded dead. Heard Doc K0EVZ calling CQ, so moved up a bit
and found no one. Called CQ a couple of times - NADA - Heard some real
faint ones and hope I didn't accidentally step on anyone. If I did, I
apologize. Early on, Brian (KB9BVN was LOUD into KS and of course so
was LL K3ESE. Wish I had the real estate for a big loop, but my 90

foot B & W Folded dipole does pretty well. Never heard Jerry N0JRN on 40 but snagged him on 80. Thanks all of you. Fun sprint this time as well. 72 es 00 to all - - de Jim, W0EB FP-616

K0EVZ, Doc, 4 watts, fpqso=29 fpdxqso=0 nonfpqso=4 spc=22
total=2002

It was truly a fun event! I heard old friends, and also a few new calls. Thanks everyone. I messed up on the time conversion to Zulu, so only got into action for the last hour. Hmmm! Setup here was an Elecraft KX1 (#80) at 4 watts to a homebrew wire ground plane with 4 above ground radials. 73, --Doc/K0EVZ

K3ESE, Lloyd, 5W, fpqso=26 fpdxqso=0 nonfpqso=7 spc=21 total=1785
Love this Sprint! Fun to run in the piggiefest with the multiPIG+ and hawg wahr loop. And a pleasure to be able to cruise on up to 80 for a few more after 40 shuts down! oo!

KW4JS, John M. Stooksbury, 5W, fpqso=22 fpdxqso=0 nonfpqso=6
spc=16 total=1152
Thanks to everyone. Rig used was a K2 with random wire up as a vertical.

K1EV, Bill, 5 W, fpqso=17 fpdxqso=0 nonfpqso=4 spc=17 total=935
I think something bad happened to my 80 meter dipole, but it's dark and snowing, so it'll have to wait til next time. Great time, but lots of noise up here. 72 & oo. Bill

N0JRN, Jerry, 5, fpqso=15 fpdxqso=0 nonfpqso=4 spc=13 total=637
It was a bunch of fun. Seems I have some tweaking to do on the filters on this rig before I send it off. Glad to see so many folks on the bands. Lots of activity on 40 early on but the AGC circuit in this K2 sucks and the QRM was killing me. Where's my MP + and that superb bandpass filter? Thanks to everyone for the Q's and sorry to those that I missed. I hope everyone had a good time. 72 es oo to the gang. Jerry

WA8BXN, Mike , 5 W, fpqso=16 fpdxqso=0 nonfpqso=2 spc=12
total=600

FP Run for the bacon Jan 04 K2 g5rv jr /80 M dipole @25ft 5w rst sent
559 Times EST 20 M 8:04 PM 1/18/2004 w0eb 559 ks 616 8:06 PM 1/18/2004
kb9bvn 559 in 57 8:09 PM 1/18/2004 kg4fsn 559 fl 449 8:15 PM 1/18/2004
w5frg 459 ar 744 8:18 PM 1/18/2004 k5jhp 559 tx 737 40 m 8:26 PM
1/18/2004 kw4js 559 tn 592 8:34 PM 1/18/2004 w0eb 559 ks 616 8:39 PM
1/18/2004 k5mvr 559 tx 694 9:03 PM 1/18/2004 k0evz 559 nm 49 80m 9:20
PM 1/18/2004 n0jrn 559 mo 546 9:27 PM 1/18/2004 w2agn 599 nj 121 9:30
PM 1/18/2004 k9is 559 wi 5w 9:40 PM 1/18/2004 w0eb 559 ks 616 9:49 PM
1/18/2004 kw4js 559 tn 592 9:52 PM 1/18/2004 n9ne 599 wi 5w 9:53 PM
1/18/2004 k3ese 559 md 476 9:55 PM 1/18/2004 n0nbd 559 ks 665 9:57 PM

1/18/2004 wb6bwz 599 ga 378

K5JHP, Bill Pierrard, 5 W, fpqso=14 fpdxqso=0 nonfpqso=0 spc=13
total=546

Very good contest....not stressfull. Band played tricks on prop but otherwise a pleasant evening. My first Run for Bacon but surely not my last....

KB9BVN, Brian , 5, fpqso=13 fpdxqso=0 nonfpqso=3 spc=10 total=420
Bands could be better...hahahah...W0EB and K3ESE blew my headphones off...wow. Working AD7AN in the QRN tonight was a real treat...Tim is in Idaho! As always, I didn't win but I had a lot of fun. I gave up at 09:30 or so...40m was QRN city...no 80m here...72 es 00 to all you piggies!

W2AGN, John L. Sielke, 5W, fpqso=10 fpdxqso=0 nonfpqso=3 spc=12
total=396

MP+ on 40 and 80. Very Noisy.

WA8HSB, John, 5W, fpqso=10 fpdxqso=0 nonfpqso=2 spc=12 total=384
My first Run for the Bacon and I really enjoyed it! Nice and calm contest. 20 was dead when I started so I stuck it out on 40 for what little time I could spend. See everyone in the next one! 72 to all...
John

NK9G, Rick McGaver, 5 watts, fpqso=10 fpdxqso=0 nonfpqso=2 spc=11
total=352

AD7A with the strongest signal hr in S.E. WI. Condx so so , just like in Foxhunts. Seemed like a lot of low power, milliwatt stations . I guess weak because of propagation. Operated 40 mtrs only.

KQ9L, Rich , 5, fpqso=10 fpdxqso=0 nonfpqso=1 spc=10 total=310
Thank you all little piggies, that was fun, too bad I couldn't play longer! 00 Rich KQ9L

N3PXF, ERNIE THOMAS, 5W, fpqso=10 fpdxqso=0 nonfpqso=1 spc=10
total=310

tk's fer the help guys - only had about 45 min to play but enjoyed it

W5FRG, Brent, 5, fpqso=9 fpdxqso=0 nonfpqso=0 spc=9 total=243
I worked nine members in nime states. Probably could have worked more, but I kept stopping to watch the football game. 73 es 00 Brent FP #
744

W8DIZ, Diz, 5, fpqso=8 fpdxqso=0 nonfpqso=3 spc=8 total=216
Nasty bands, Worked mostly 40 and a couple on 80 Seemed I heard more stations than could hear me.

AD7AN, Timothy Gordish, 5W, fpqso=6 fpdxqso=0 nonfpqso=5 spc=9
total=207

Was only able to get on 40 meters with my K1 40/15. Still makes some good QSO's to the east coast. Had fun. Sorry to all the stations I had too much trouble hearing to work. There is a lot of noise locally.

K0ZK, Arnold Olean, 3, fpqso=7 fpdxqso=0 nonfpqso=3 spc=8
total=192

Very rough conditions Radio black outs at this time 40 meters only using HB 1 tube Xmtr and a 3 tube RX.

WB8YYY, Curt, 5, fpqso=8 fpdxqso=0 nonfpqso=0 spc=7 total=168
I just wanted to make a few Q's toward WAP. Too many people were operating on 7044 +/- 0.3 kHz at the same time. Let's all try to spread out just a little bit more - or am the one to not have DSP? AD7AN was workable here - too bad I could not give Tim my low noise level and I could not have someone else's higher trees! I did demonstrate the K2 has a little more dynamic range than the K1, as my 'neighbor' Lloyd was running stations about 400 Hz below Tim and the mutual QRM got to him more than me! Woops - Lloyd was running the multipig which should be at least as good as the K2! Of course all this means is I am in the doghouse and I got no QSO to ID in the deal! Oh yes - I spent most of event watching Ken Burn's Lewis and Clark on video -- you folk out west have great scenery! If they had W7ZOI and his HB QRP rigs hiking with them they would have had an easier time with logistics!

WB6BWZ, Matt, 5, fpqso=6 fpdxqso=0 nonfpqso=1 spc=6 total=114
My first RFTB. Yaesu FT-897 xcvr running 5 watts into a 5-MHz OCF 28-gauge insulated wire stealth antenna up 40 feet in trees next to I-75 in downtown Atlanta industrial area. SGC SG-237 autotuner. --Matt, WB6BWZ (FP-378), Atlanta, GA

KC5GXL, Dan, 5W, fpqso=6 fpdxqso=0 nonfpqso=0 spc=6 total=108
Lots of fun tonight. Heard a bunch of stations, even worked a few. I made contacts on 40 and 80. Great signals into Texas! I even worked the elusive Jerry, N0JRN, for the first time this year. HI HI Tnx Jerry for setting up the RFTB. Really enjoyed it. 72 es oo to all, Dan Harriman, Orange, Texas

KJ0C, Jim, 5 watts, fpqso=6 fpdxqso=0 nonfpqso=1 spc=5 total=95

KC8AON, RICK, 5W, fpqso=5 fpdxqso=0 nonfpqso=0 spc=5 total=75
My ears are ringing ! But I had fun !

KC9EUH, Jay, 5, fpqso=5 fpdxqso=0 nonfpqso=0 spc=5 total=75
40 started out great then hit bottom. Heard a few on 80 but couldn't

make it. Great fun at beginning on 40 very active

KG4FSN, Juan Ferrari, 5 Watts, fpqso=4 fpdxqso=0 nonfpqso=2 spc=5
total=70

20 Mts died early and having fried the PA of my SW40, my participation
ended with the band. 00s, Juan - KG4FSN

W6Z0, Don, 5W, fpqso=3 fpdxqso=0 nonfpqso=2 spc=5 total=55
Hugh QRN prevented most copy so S & P - be back next year from quieter
QTH

W7ILW, Howard, 5W, fpqso=3 fpdxqso=0 nonfpqso=0 spc=3 total=27
Very Poor Cndx, here

KB8QPT, sergio, 5w, fpqso=1 fpdxqso=0 nonfpqso=0 spc=1 total=3
i turned the machine on at 10:30.. i should have figured out how to
program my keyer.. but i didn't have time.. heard k0evz calling a few
times, and i got him.. then i went looking on the other bands.. i
heard no other fp calls.. i did hear stuff on 40, though.. but in that
half hour, i sent k0evz a bunch of bad cw.. he copied it, though!
thanks!

N00R, Jim Broden, 5, fpqso=0 fpdxqso=0 nonfpqso=0 spc=0 total=0

Date: Fri, 23 Jan 2004 19:27:09 -0500
From: Ed Tanton <n4xy@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>,
noga <nogaqrp@mailman.qth.net>
Subject: [166123] Question on antenna fields...
Message-ID: <6.0.1.1.2.20040123185841.01e17010@pop.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Is the Handbook (and any number of publications and OWTs*) statements about
OWL feedline radiating applicable to a 'clean' signal? If so... why? If
it's because the twin wires of OWL supposedly cancel each other out; how
can that be true in any other plane but THE plane the two wires are in
(that being the plane of the flat surface between the two wires.) I can't
imagine those vectors canceling anywhere but the one plane, and even then
there's actually the matter of that distance between them troubling me

mathematically[*2]. What about the other 369.999 etc. degrees? And if feedline radiation "causes difficulty", why wouldn't an end-fed-wire "cause difficulty"? (And I don't want to hear about coax-fed EFWs. Let's not count putting a transformer/balun/whatever out at the antenna feedpoint for this question.)

If your goal is to put all the radiation you possibly can into one direction, or even one antenna radiation angle, I can see where 'lost' radiation might matter. But I see nothing wrong with some component of your signal being vertical... except for some possible increase in noise reception.

I'm not trying to be difficult here... I have heard that feedline radiation argument/comment since I was a 15 yr old Novice in 1961, and never thought to question it's origins. But somehow I just happened to earlier this evening, and realized I didn't have a clue as to WHY it should be true-barring either a TVI-prone signal ("Who me?") or the directionality/radiation angle thing.

Where am I going wrong here folks?

- *1) OWT: Old Wives' Tale; OWL: Open Wire Line; & EFW: End Fed Wire
- *2) OTOH, virtually ALL of this would trouble me mathematically if I even tried to THINK about the math-much less actually perform a calculation

72/73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

"He that gives up a little liberty to gain
temporary security will lose both and
deserve neither".
--Benjamin Franklin

"Suppose you were an idiot ...
and suppose you were a member of

Congress... but I repeat myself."

--Mark Twain

Date: Fri, 23 Jan 2004 17:55:13 -0700 (MST)
From: Karl Larsen <k5di@zianet.com>
To: w9ya@arrl.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [166124] Re: End and Center Fed Dipoles
Message-ID: <Pine.LNX.4.44.0401231749180.5289-1000000@bucket.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 23 Jan 2004 w9ya@arrl.net wrote:

> >
> > I looked up in the latest ARRL Antenna Book the End fed Zepp
> > antenna. This book says that you can load a 1/2 wave dipole fed with 450
> > ohm ribbon that is NOT a 1/4 wave long. It says the feedline will
> > radiate and this can cause difficulty.
>
> Hey Karl and the gang;
>
> Hmmmmm, where to start with the above. Well I do NOT necessarily agree
> with your statement in many respects, but to simplify things and make for
> a short response;
>
> One can easily make a feedline that is of a physical length so that it is
> NOT electrically a 1/4 wave (or odd multiple thereof) *appear* as an
> electrical 1/4 wave long. Some people call these "antenna tuners". So,
> there should be (usually) no problem achieving this "requirement" even
> when the feedline itself is physically of some other electrical length.

I quoted what is in the ARRL manual. Yes a tuner can change things BUT, if the feedline is near 1/4 wave long tuner or not your feedline will radiate.

>
> As for the statement below: one can use coax, *AS LONG AS* one takes care
> to isolate the "third" path correctly,

I guess you mean the path on top of the shield?

interchangeably with two-wire line
> to center feed a dipole. If the coax is large enough, it can actually have
> lower loss characteristics than (so-called) modern ladder line. It also
> has the additional benefit of stable loss characteristics in inclement
> weather whereas the modern ladder line has LOUSY loss characteristics when
> wet.
>

This coax you speak of is expensive. It's called "hard line" and
it can be found in the 3/4" size at \$14.00/foot. Works great and lasts
well.

> Hope this helps and vy 72;

>

> Bob

> w9ya

>

> >

> > The Center fed antenna on the other hand is balanced so the
> > feedline will and should be balanced and thus will not radiate. The
> > length of the antenna and the feedline are not important.

> >

> > This is why all my wire antenna's are center fed using 450 ohm
> > ribbon feedlines.

> >

> > --

> >

> > - Karl Larsen k5di Las Cruces,NM Az ScQRPions -

>

>

>

>

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

Date: Fri, 23 Jan 2004 16:52:49 -0800

From: Bob Nielsen <nielsen@oz.net>

To: qrp-l@lehigh.edu

Subject: [166125] Re: Warren Gregoire Head Phones

Message-ID: <20040124005249.GA11376@bob.localnet>

Mime-Version: 1.0

Content-Type: text/plain; Format=Flowed; DelSp=Yes; charset=ISO-8859-1

Content-Disposition: inline
Content-Transfer-Encoding: 8bit

Thanks for all the fine responses. I just ordered a set.

Bob, N7XY

Date: Fri, 23 Jan 2004 20:59:51 -0500
From: "Brian Murrey" <brian@iquest.net>
To: <Makos327@worldnet.att.net>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [166126] Re: Congratulations, N8IE !!!
Message-ID: <010501c3e21d\$c1be29a0\$02fea8c0@bjmw2k>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Dan...is THE MAN!

----- Original Message -----
From: "Lawrence Makoski" <Makos327@worldnet.att.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Friday, January 23, 2004 6:53 PM
Subject: Congratulations, N8IE !!!

> If anyone posted this before, I apologize for my redundancy!
>
> I was leafing through my January issue of CQ while eating lunch today
at
> work. I came across the scores for the 2003 CQ WW WPX SSB Contest.
>
> Dan, N8IE was the top QRP/p operator in the USA and finished in the
top
> 10 worldwide !!!
>
> Way to go, Dan !!!
> 73 de Larry W2LJ - Vivat Morse!
>
> W2LJ@arrl.net
> <http://www.qsl.net/w2lj>
>
> ARRL Lifemember QRP ARCI #4488 NJQRP #47
> FISTS #1469 QRP-L #778 FP #612 QRPp-I #759
> ARS #1528 --- K1 #1647 --- AmQRP, CQC #746

>
>
>
>

Date: Fri, 23 Jan 2004 20:59:04 -0500
From: "Hare,Ed, W1RFI" <w1rfi@arrl.org>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [166127] RE: Question on antenna fields...
Message-ID: <721D3436A7C2B344A301FD4A413C71A90173597D@kosh.arrlhq.org>
content-class: urn:content-classes:message
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

A few years back, I helped a ham who did a poster session on the topic =
at a European "RF Safety" symposium. His posters are at:

<http://www.arrl.org/~ehare/bems/bp.doc>

His in-person explananation helped, but the bottom line is that the two =
lines do cancel out quite a bit.

Ed Hare, W1RFI
ARRL Lab
225 Main St
Newington, CT 06111
Tel: 860-594-0318
Internet: w1rfi@arrl.org
Web: <http://www.arrl.org/tis>
Member: IEEE C63 - Accredited Standards Committee on Electromagnetic =
Compatibility
Chairman: C63 SC-5, Immunity
Chairman: C63 ad hoc PLC/BPL Working Group
Member: SAE EMC/EMR committees
Member: ICES/IEEE SCC-28 International Committee on Electromagnetic =
Safety
Member/staff: ARRL, The National Association for Amateur Radio
Member/Board of Directors: QRP Amateur Radio Club International

> -----Original Message-----

> From: owner-qrp-1@Lehigh.EDU=20
> [mailto:owner-qrp-1@Lehigh.EDU]On Behalf Of
> Ed Tanton
> Sent: Friday, January 23, 2004 7:27 PM
> To: Low Power Amateur Radio Discussion
> Subject: Question on antenna fields...
>=20
>=20
> Is the Handbook (and any number of publications and OWTs*)=20
> statements about=20
> OWL feedline radiating applicable to a 'clean' signal? If=20
> so... why? If=20
> it's because the twin wires of OWL supposedly cancel each=20
> other out; how=20
> can that be true in any other plane but THE plane the two=20
> wires are in=20
> (that being the plane of the flat surface between the two=20
> wires.) I can't=20
> imagine those vectors canceling anywhere but the one plane,=20
> and even then=20
> there's actually the matter of that distance between them=20
> troubling me=20
> mathematically[*2]. What about the other 369.999 etc. degrees? And if=20
> feedline radiation "causes difficulty", why wouldn't an=20
> end-fed-wire "cause=20
> difficulty"? (And I don't want to hear about coax-fed EFWs.=20
> Let's not count=20
> putting a transformer/balun/whatever out at the antenna=20
> feedpoint for this=20
> question.)
>=20
> If your goal is to put all the radiation you possibly can into one=20
> direction, or even one antenna radiation angle, I can see=20
> where 'lost'=20
> radiation might matter. But I see nothing wrong with some=20
> component of your=20
> signal being vertical... except for some possible increase in=20
> noise reception.
>=20
> I'm not trying to be difficult here... I have heard that=20
> feedline radiation=20
> argument/comment since I was a 15 yr old Novice in 1961, and=20
> never thought=20
> to question it's origins. But somehow I just happened to earlier this=20
> evening, and realized I didn't have a clue as to WHY it should be=20
> true-barring either a TVI-prone signal ("Who me?") or the=20
> directionality/radiation angle thing.
>=20

> Where am I going wrong here folks?
>=20
> *1) OWT: Old Wives' Tale; OWL: Open Wire Line; & EFW: End Fed Wire
> *2) OTOH, virtually ALL of this would trouble me=20
> mathematically if I even=20
> tried to THINK about the math-much less actually perform a calculation
>=20
>=20
> 72/73 Ed Tanton N4XY <n4xy@earthlink.net>
>=20
> Ed Tanton N4XY
> 189 Pioneer Trail
> Marietta, GA 30068-3466
>=20
> website: <http://www.n4xy.com>
>=20
> All emails <IN> & <OUT> checked by
> Norton AntiVirus with AutoProtect
>=20
> LM: ARRL QCWA AMSAT & INDEXA;
> SEDXC NCDXA GACW QRP-ARCI
> OK-QRP QRP-L #758 K2 (FT) #00057
>=20
> -----
> "He that gives up a little liberty to gain
> temporary security will lose both and
> deserve neither".
> --Benjamin Franklin
>=20
> "Suppose you were an idiot ...
> and suppose you were a member of
> Congress... but I repeat myself."
> --Mark Twain
> -----
>=20
>=20
>=20

Date: Fri, 23 Jan 2004 21:11:28 -0500
From: Jim Campbell <jim-c@charter.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [166128] Code Practice Software
Message-ID: <4011D450.6050600@charter.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

I was using a code practice program some time ago and lost it when migrating to a new hard drive. The program simulated a contest. When you hit the "tune" button, you would hear a station calling CQ. When you keyed in the correct callsign, the program would return to you and give you a signal report and you could once again hit "tune". It was ideal for helping one learn to copy callsigns, which are a weak point for me.

Any information about the whereabouts of this program would be much appreciated.

72,

Jim
W4BQP

Date: Fri, 23 Jan 2004 21:10:16 -0500
From: "W. Keith Hibbert" <wkhibbert@frontiernet.net>
To: qrp-l@lehigh.edu
Subject: [166129] GLB Channelizer found (in Quantity!)
Message-ID: <5.1.0.14.0.20040123210841.009faec0@pop3.frontiernet.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Wow!.. Quite a few Channelizers out there! I will be sending a check to Gene, N0MQ for his unit.

Thanks for all the offered units.

73, Keith, WB2VUO

Date: Fri, 23 Jan 2004 20:28:46 -0600
From: "Nick Kennedy" <wa5bdu@tcainternet.com>
To: <n4xy@earthlink.net>,
 "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [166130] RE: Question on antenna fields...
Message-ID: <000d01c3e221\$cb236b00\$0400000a@wa5bdu>
MIME-Version: 1.0

Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit

Does the "clean" signal statement refer to the lack of signal distortion, or to the radiation pattern being "clean" and pleasing to the eye when viewed on paper or computer screen? I can imagine it being either, although "distortion" of the radiation pattern certainly can't be detected on the receiving end as any kind of distortion.

The only instance of signal distortion that I know of can occur when feedline radiation causes RF feedback into the transmitter resulting in self oscillation. I've seen that happen. I think the RF feedback typically is coupled back via the power supply leads.

Now, about cancellation of radiation from the feedline. It's not really necessary to analyze the situation in all planes. The radiation field is 3-dimensional and the cancellation applies in 3 directional space and therefore to any planar subset of it.

It's helpful to consider the right hand rule, wherein you point your thumb along the direction of current in the wire and the resulting (magnetic) field is in the direction of your curled fingers. It's actually any number of concentric circles at every distance from the conductor, of which your fingers are describing one. The field strength is decreasing as you get further from the wire.

OK, you've done one wire and you have an image of the field and its direction at every point. Now, do the other wire. You'll describe the same field, but since the current is equal and in the opposite direction, it is tending to oppose (cancel) the field from the first wire. (You pointed your thumb the other way.)

Assume the spacing is one inch. Consider a point 0.01 inch away from one wire, in the direction of the plane of the two wires. The field from the wire 0.01 inch away is much stronger than that from the wire 1.01 inches away and cancellation is poor. Now go out to 12 inches away. Now the distance from the two wires is 12 inches and 13 inches and cancellation is much better. This is the worst case direction. Best case is along a line normal to the plane of the two conductors from a point midway between them. Along this line, complete cancellation occurs regardless of distance, due to the symmetry.

So it should be obvious that essentially complete cancellation occurs at distances that are large with respect to the spacing. This is one good reason for the rule about keeping your ladder line well spaced away from conductors. You're not going to induce currents in them if the fields have cancelled.

72--Nick, WA5BDU

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of Ed Tanton
Sent: Friday, January 23, 2004 6:27 PM
To: Low Power Amateur Radio Discussion
Subject: [qrp-1] Question on antenna fields...

Is the Handbook (and any number of publications and OWTs*) statements about
OWL feedline radiating applicable to a 'clean' signal? If so... why? If
it's because the twin wires of OWL supposedly cancel each other out; how

can that be true in any other plane but THE plane the two wires are in
(that being the plane of the flat surface between the two wires.) I
can't
imagine those vectors canceling anywhere but the one plane, and even
then
there's actually the matter of that distance between them troubling me
mathematically[*2]. What about the other 369.999 etc. degrees? And if
feedline radiation "causes difficulty", why wouldn't an end-fed-wire
"cause
difficulty"? (And I don't want to hear about coax-fed EFWs. Let's not
count
putting a transformer/balun/whatever out at the antenna feedpoint for
this
question.)

Date: Fri, 23 Jan 2004 19:57:30 -0700 (MST)
From: Karl Larsen <k5di@zianet.com>
To: Ed Tanton <n4xy@earthlink.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [166131] Re: Question on antenna fields...
Message-ID: <Pine.LNX.4.44.0401231944040.5289-1000000@bucket.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 23 Jan 2004, Ed Tanton wrote:

> Is the Handbook (and any number of publications and OWTs*) statements about

> OWL feedline radiating applicable to a 'clean' signal? If so... why? If
> it's because the twin wires of OWL supposedly cancel each other out; how
> can that be true in any other plane but THE plane the two wires are in
> (that being the plane of the flat surface between the two wires.) I can't
> imagine those vectors canceling anywhere but the one plane, and even then
> there's actually the matter of that distance between them troubling me
> mathematically[*2]. What about the other 369.999 etc. degrees? And if

You want to prove it mathematically Ed. A much easier way is to
tune up an antenna and put out a key-down 5 watts. With a small
floresant lamp hold one end and get the other close to the OWL. If it
lights your OWL is unbalanced and radiating. If it does not light
anywhere over a few yards of the OWL then your OWL is balanced.

George W5YR caught me playing with a 44 foot wire end fed with
good 300 ohm ribbon. The antenna worked just fine! No RF in the shack.
George told me to check it with the lamp and the feedline was radiating
like crazy! I then checked my center fed 88 foot wire and it was
balanced.

The end fed 44 foot radiator was just a random wire with a
single wire feeder.

> feedline radiation "causes difficulty", why wouldn't an end-fed-wire "cause
> difficulty"? (And I don't want to hear about coax-fed EFWs. Let's not count
> putting a transformer/balun/whatever out at the antenna feedpoint for this
> question.)

The "difficulty" is RF in the shack. You can use an artificial
ground to correct the difficulty but it means another tune-up step when
changing bands.

>
> If your goal is to put all the radiation you possibly can into one
> direction, or even one antenna radiation angle, I can see where 'lost'
> radiation might matter. But I see nothing wrong with some component of your
> signal being vertical... except for some possible increase in noise reception.
>

More telephone and TV interference.

> I'm not trying to be difficult here... I have heard that feedline radiation
> argument/comment since I was a 15 yr old Novice in 1961, and never thought
> to question it's origins. But somehow I just happened to earlier this
> evening, and realized I didn't have a clue as to WHY it should be
> true-barring either a TVI-prone signal ("Who me?") or the
> directionality/radiation angle thing.

>
> Where am I going wrong here folks?
>
> *1) OWT: Old Wives' Tale; OWL: Open Wire Line; & EFW: End Fed Wire
> *2) OTOH, virtually ALL of this would trouble me mathematically if I even
> tried to THINK about the math-much less actually perform a calculation
>
>
> 72/73 Ed Tanton N4XY <n4xy@earthlink.net>
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> Ed Tanton N4XY
> 189 Pioneer Trail
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> website: <http://www.n4xy.com>
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> All emails <IN> & <OUT> checked by
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> LM: ARRL QCWA AMSAT & INDEXA;
> SEDXC NCDXA GACW QRP-ARCI
> OK-QRP QRP-L #758 K2 (FT) #00057
>
> -----
> "He that gives up a little liberty to gain
> temporary security will lose both and
> deserve neither".
> --Benjamin Franklin
>
> "Suppose you were an idiot ...
> and suppose you were a member of
> Congress... but I repeat myself."
> --Mark Twain
> -----
>
>
>
--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

Date: Fri, 23 Jan 2004 21:53:54 -0500 (EST)
From: <w9ya@arrl.net>
To: <qrp-1@Lehigh.EDU>

Subject: [166132] Re: End and Center Fed Dipoles
Message-ID: <1057.192.168.1.117.1074912834.squirrel@gateway>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8bit

> On Fri, 23 Jan 2004 w9ya@arrl.net wrote:

>

>> >

>> > I looked up in the latest ARRL Antenna Book the End fed Zepp
>> > antenna. This book says that you can load a 1/2 wave dipole fed with
>> 450

>> > ohm ribbon that is NOT a 1/4 wave long. It says the feedline will
>> > radiate and this can cause difficulty.

>>

>> Hey Karl and the gang;

>>

>> Hmmmmm, where to start with the above. Well I do NOT necessarily agree
>> with your statement in many respects, but to simplify things and make
>> for a short response;

>>

>> One can easily make a feedline that is of a physical length so that it
>> is NOT electrically a 1/4 wave (or odd multiple thereof) *appear* as
>> an electrical 1/4 wave long. Some people call these "antenna tuners".
>> So, there should be (usually) no problem achieving this "requirement"
>> even when the feedline itself is physically of some other electrical
>> length.

>

> I quoted what is in the ARRL manual. Yes a tuner can change
> things BUT, if the feedline is near 1/4 wave long tuner or not your
> feedline will radiate.

Hey Karl and the gang;

Thanxs for sticking with me this far.

To the above -> Huh ?

Perhaps if you can give me the chapter and section where this information
appears in the ARRL book I can give a more detailed answer. I would like
to see the context this statement from the antenna book.

As for feedline radiating when it is being run *fully* balanced, well no.
(Or as the kids say -> "not").

BTW, if it helps, you can consider the 1/4 wave balanced line up and 1/2
wave out antenna to be a horizontally polarized j-pole that has a 1/2 wave
radiator on top of the 1/4 wave coupling section. Same basic construction.

(OR you can take a full wavelength of wire and double back a 1/4 wave on the end to get the same thing.)

>
>>
>> As for the statement below: one can use coax, *AS LONG AS* one takes
>> care to isolate the "third" path correctly,
>
> I guess you mean the path on top of the shield?

Yes. Actually it would be more correct to say the "outer surface of the outer conductor".

>
>
> interchangeably with two-wire line
>> to center feed a dipole. If the coax is large enough, it can actually
>> have lower loss characteristics than (so-called) modern ladder line.
>> It also has the additional benefit of stable loss characteristics in
>> inclement weather whereas the modern ladder line has LOUSY loss
>> characteristics when wet.
>>
> This coax you speak of is expensive. It's called "hard line" and
> it can be found in the 3/4" size at \$14.00/foot. Works great and lasts
> well.

Yep. In fact you can get useful lengths for almost free if you know how. Well maybe I should say "use to", as it is not as common a surplus item as it was 10 years ago. Back then it took me about a week or so in my spare time to line up 5000 feet in 100-ish foot long lengths. I gave away more than I kept. I also use it alot around here.

Anyways, I hope this helps out some.

Very best regards;

Bob Finch
w9ya

>
>
>
>> Hope this helps and vy 72;
>>
>> Bob
>> w9ya
>>

>> >
>> > The Center fed antenna on the other hand is balanced so the
>> > feedline will and should be balanced and thus will not radiate. The
>> length of the antenna and the feedline are not important.
>> >
>> > This is why all my wire antenna's are center fed using 450 ohm
>> > ribbon feedlines.
>> >
>> > --
>> >
>> > - Karl Larsen k5di Las Cruces,NM Az ScQRPions -
>>
>>
>>
>>
>
> --
>
> - Karl Larsen k5di Las Cruces,NM Az ScQRPions -

Date: Fri, 23 Jan 2004 22:12:18 EST
From: Nightowls627@aol.com
To: qrp-1@Lehigh.EDU
Subject: [166133] rock mite 20 straight key
Message-ID: <5a.26b5db6b.2d433c92@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hello group. Just finished a rock mite 20 and have some issues (No fault of my own though I am sure!!) Anyways, I hooked up the battery and no smoke and I did hear "energy" going through my headphones. The offset button is also working. However, when I plug in the straight key, all I hear are dashes as if something inside the ic is shorted. Here's the kicker; I soldered the ic's directly to the board with no socket. Dumb dumb, I know. Do you think I may have shorted it out internally as that is the source of the dit dahs? Any suggestions welcome. Multimeter reads out ok.

G. Doughty
ki4bbl@arrl.net

Date: Fri, 23 Jan 2004 22:12:59 -0500
From: "Brent Sutphin WB4X" <bsutphin@triad.rr.com>
To: <qrp-l@Lehigh.EDU>
Subject: [166134] Light Weight Paddles
Message-ID: <008401c3e227\$f87efe60\$9e6d1f18@BandE>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thanks to all of you who replied to my previous post in regards to light weight paddles for the Sprint. I didn't know there were so many of them available. I like the Whiterook and called to order one, but they are closed for a week of vacation. I decided to build the NB6M paddle as described on the AMQRP web site. I stopped by the local RS and picked up a double sided PC board on the way home from work. A couple of hours later I made my first contact with them. It was really surprising that they so well and very light weight.

72
Brent WB4X

Date: Fri, 23 Jan 2004 20:18:55 -0700
From: "James R. Duffey" <JamesDuffey@comcast.net>
To: <n4xy@earthlink.net>
Cc: QRP-L <qrp-l@lehigh.edu>
Subject: [166135] Re: Question on antenna fields...
Message-ID: <BC37322F.115E1%JamesDuffey@comcast.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Ed - I don't think that you are missing anything.

Open wire feedlines radiate as if they were a dipole equal in length to the openwire feedline spacing. This radiation is pretty small in the far field, and is usually passed off as being neglible.

On 160 M, 450 Ohm window line is about 1/6400 of a wavelength and won't radiate much at all. On 5 GHz, the same ladder line is spaced nearly a half wavelength and will radiate a lot.

A good rule of thumb is the open wire line should be spaced less than 1 degree (1/360 wavelength) to have minimal radiation. For the 450 Ohm ladder

line, spaced about 1 inch, this is a wavelength of 360 inches or 9 meters. So if there is a lot of harmonic content at TV frequencies, open wire line could, as you surmise, exacerbate TVI.

Makes you wonder about those J-Poles on 2 meters doesn't it? - Dr. Megacycle
KK6MC/5

James R. Duffey KK6MC/5
Cedar Crest NM 87008 DM65

Date: Fri, 23 Jan 2004 22:12:16 -0500 (EST)
From: <w9ya@arrl.net>
To: <qrp-l@Lehigh.EDU>
Subject: [166136] Re: Question on antenna fields...
Message-ID: <1070.192.168.1.117.1074913936.squirrel@gateway>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8bit

> Is the Handbook (and any number of publications and OWTs*) statements
> about OWL feedline radiating applicable to a 'clean' signal? If so...
> why? If it's because the twin wires of OWL supposedly cancel each other
> out; how can that be true in any other plane but THE plane the two
> wires are in (that being the plane of the flat surface between the two
> wires.) I can't imagine those vectors canceling anywhere but the one
> plane, and even then there's actually the matter of that distance
> between them troubling me mathematically[*2]. What about the other
> 369.999 etc. degrees? And if feedline radiation "causes difficulty",
> why wouldn't an end-fed-wire "cause difficulty"? (And I don't want to
> hear about coax-fed EFWs. Let's not count putting a
> transformer/balun/whatever out at the antenna feedpoint for this
> question.)

Hey Ed;

I will try to answer this as simply as I can. Basically if the fields are large (or long, take your pick) compared to the placement of the two conductors with opposing "polarities", then the distance between them will be trivial and the fields will be effectively immediately on top of one another and therefore cancel. There IS alot more to it than that, but this should work for the purposes here.

>
> If your goal is to put all the radiation you possibly can into one
> direction, or even one antenna radiation angle, I can see where 'lost'

> radiation might matter. But I see nothing wrong with some component of
> your signal being vertical... except for some possible increase in
> noise reception.

Bingo, good point, and one that shows you think outside of the box ! In fact there are some antennas marketed commercially that take advantage of coax feedline radiation from the "third" path on the outer surface of the line.

>
> I'm not trying to be difficult here... I have heard that feedline
> radiation argument/comment since I was a 15 yr old Novice in 1961, and
> never thought to question it's origins. But somehow I just happened to
> earlier this evening, and realized I didn't have a clue as to WHY it
> should be true-barring either a TVI-prone signal ("Who me?") or the
> directionality/radiation angle thing.

Well it depends on variables in any particular situation as to whether the such radiation is A - present on a (for instance) coax center fed dipole and B - wanted or unwanted.

Another example of your correctly questioning some of the incomplete (and sometimes misleading) statements that seem to pervade in our hobby.

Good job OM es vy 72;

Bob
w9ya

>
> Where am I going wrong here folks?

> *1) OWT: Old Wives' Tale; OWL: Open Wire Line; & EFW: End Fed Wire *2)
> OTOH, virtually ALL of this would trouble me mathematically if I even
> tried to THINK about the math-much less actually perform a calculation
>
>
> 72/73 Ed Tanton N4XY <n4xy@earthlink.net>
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> Marietta, GA 30068-3466
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> All emails <IN> & <OUT> checked by
> Norton AntiVirus with AutoProtect
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> LM: ARRL QCWA AMSAT & INDEXA;
> SEDXC NCDXA GACW QRP-ARCI
> OK-QRP QRP-L #758 K2 (FT) #00057
>
> -----
> "He that gives up a little liberty to gain
> temporary security will lose both and
> deserve neither".
> --Benjamin Franklin
>
> "Suppose you were an idiot ...
> and suppose you were a member of
> Congress... but I repeat myself."
> --Mark Twain
> -----

Date: Fri, 23 Jan 2004 22:40:18 -0500 (Eastern Standard Time)
From: "Mike WA8BXN" <hubby2k@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>,
<Nightowls627@aol.com>
Subject: [166137] Re: rock mite 20 straight key
Message-ID: <4011E922.000004.03820@compaq1500>
MIME-Version: 1.0
Content-Type: Text/Plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I think it senses a straight key at powerup, so plug the key in first, then turn on power. If the key is not there when power is on, it assumes paddles and the straight key looks like all dashes (pressing your key should alternate in iambic fashion). Probably nothing wrong with the rock mite.
73/72 - Mike WA8BXN

Date: Fri, 23 Jan 2004 22:50:08 -0500
From: Nick Yokanovich <k3ny@cablespeed.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [166138] Re: Code Practice Software

Message-ID: <4011EB70.3070901@cablespeed.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Jim Campbell wrote:

> I was using a code practice program some time ago and lost it...

It is too new to be the one you lost, but G4FON has built a contest trainer to go with his Koch trainer. It is at <http://www.qsl.net/g4fon/>

73
Nick K3NY

Date: Fri, 23 Jan 2004 23:04:08 -0500
From: Ed Tanton <n4xy@earthlink.net>
To: QRP-L <qrp-l@lehigh.edu>, noga <nogaqrp@mailman.qth.net>
Subject: [166139] Re: Antenna fields
Message-ID: <6.0.1.1.2.20040123224433.01d43190@pop.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Many thanks to those of you who replied to this... especially for the terrific explanation from Phil, KF8JW. There were also several other very good explanations, and different ways of understanding this, that I really appreciated (Jim, KK6MC/5; Bob, W9YA; Karl, K5DI; Bob, VE3SUY; and Nick, WA5BDU). Wow!!!

72/73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;

SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

"He that gives up a little liberty to gain
temporary security will lose both and
deserve neither".
--Benjamin Franklin

"Suppose you were an idiot ...
and suppose you were a member of
Congress... but I repeat myself."
--Mark Twain

Date: Fri, 23 Jan 2004 21:07:49 -0700
From: Bruce Grubbs <mail@brucegrubbs.com>
To: jsielke@pobox.com,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [166140] Re: THE K2 AND AIRPLANE BUFFS
Message-ID: <200401232107.49457.mail@brucegrubbs.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

On Friday 23 January 2004 03:33 pm, John Sielke wrote:
> > also found out the slower I come in for landings the closer I stay to the
> > start of the runway, instead of the other side...
> > also found out when u come in at 15 knots over stall speed u
> > better get ur flare correct or u will watch ur main gear flex a lot....
> > unless of course u hit on the nose gear, which instantly becomes
> > retractable.... :-)
>
> REminds me of when I soloed. My instructor told me to do 3
> "touch-and-goes," while she watched from the tower. Of course, I was a
> bit nervous and bounced that poor Cessna 150. And I heard her on the
> radio counting "1....2....3...Ok, you're done.."
>
> Didn't help my self esteem.....nowdays that would be illegal...
>
> John W2AGN

My primary instructor wasn't that polite. More like, "If you're going to forget everything I taught you and land like that..."

--

73,
Bruce
N7CEE

Date: Fri, 23 Jan 2004 23:43:27 -0500
From: "Ron Polityka" <wb3aal@verizon.net>
To: ".QRP-L" <qrp-l@Lehigh.EDU>
Subject: [166141] Possible AT in PA on Saturday
Message-ID: <002701c3e234\$9ca32460\$0200a8c0@WB3AAL>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello,

On Saturday around 16:00 or 17:00 UTC I might be out on the Appalachian Trail with my K1. This all depends on what kind or how much of a snow fall we receive tonight. The high temperature might only be in the mid 20's with 10 to 15 MPH winds. The wind chill could be 2°F and -6°F depending on the wind. This will be a good test for cold wx and the K1. I plan on keeping the batteries in my jacket so the cold does not kill the power too quick. I might be able to use my snow shoes for once. :-) I will post my finally plans around 15:00 UTC. I am using this for my FYBO testing session. If all works out as planned I will be out for the FYBO contest next month, that is if the temp stays down below freezing.

72 and Thanks,
Ron Polityka
WB3AAL
www.n3epa.org/

Date: Sat, 24 Jan 2004 06:43:39 +0100
From: WJuergens@t-online.de (Wolf-Ruediger Juergens)
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [166142] Re: Code Practice Software
Message-ID: <006001c3e23d\$05274d10\$0100a8c0@homepc>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Jim Campbell wrote:

> Any information about the whereabouts of this program would be much

I'm sure you are searching the "MorseTest" from Julian, G4ILO.
<http://www.qsl.net/g4ilo/main.html> and then goto Software.

72 Wolf, DL2WRJ

--

<http://www.dl2wrj.de> - CW - Hellschreiber - QRP - QRPP - QRSS

Date: Fri, 23 Jan 2004 23:18:16 -0700
From: Tim Groat <tcgroat@earthlink.net>
To: qrp-1@lehigh.edu
Cc: "Tom Palmer" <n1tp@swfla.rr.com>
Subject: [166143] FOX: KR0U preliminary log
Message-ID: <5.1.1.6.2.20040123230806.00a14a60@mail.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Here is my much-delayed log. I thought I could transfer the files from the (modem-less) shack computer to my main system via floppy disk. Silly me! So it's all been re-typed, which took longer than the hunt itself did. I hope I found all the errors and omissions. Please forward corrections to me and I'll fix up the final copy.

W9JOP was ESP at the very end. I know you were in there, but I didn't get the exchange before time ran out. You made a valiant try in deteriorating conditions, and almost made it through...just a little less QRN and it would have worked.

=====

Fox Hunt Run 13 KR0U

=====

0201	N9NE	569	WI	TODD	5W
0202	N5ZE	559	TX	LEW	5W
0203	WA9TZE	599	WI	JIM	5W
0203	AC5JH	559	OK	TOM	5W
0204	N4ROA	559	VA	DAN	5W

0205	N3BJ	559	VA	ALAN	5W
0205	N9AW	599	WI	JERRY	5W
0206	N0DT	559	MO	DAN	5W
0207	NK9G	559	WI	RICK	5W
0208	W5TB	559	TX	DOC	5W
0209	W7ILW	559	AZ	WALT	5W
0210	N9AU	559	WI	RON	5W
0211	W9XU	559	WI	LON	5W
0212	VE5RC	339	SK	BRUCE	5W
0214	K0EVZ	579	NM	DOC	4W
0214	AG0T	599	ND	TODD	4W
0215	N0JRN	559	MO	JERRY	5W
0216	KK5LD	559	TX	DAN	5W
0217	K3PH	599	PA	BOB	5W
0218	VA6RF	579	AB	EARL	5W
0219	K5E0A	599	LA	WAYNE	5W
0220	KW4JS	559	TN	JOHN	5W
0221	KL7V	559	OK	SAM	5W
0223	W5HNS	559	TX	HENRY	5W
0224	NK6A	559	CA	DON	5W
0225	W0UFO	559	MN	MERT	5W
0226	AA50	559	LA	VERN	5W
0226	W9XT	559	WI	GARY	5W
0227	W5YR	559	TX	GEORGE	5W
0228	N4DD	559	TN	DENNIS	5W
0228	K9TJL	559	IL	TJ	5W
0229	W0CH	559	MO	DAVE	5W
0230	N7XM	579	NV	JOHN	800W!
0232	K5JHP	559	TX	BILL	5W
0233	K0LOA	559	TX	DWAIN	5W
0234	VE6JA	559	AB	ROB	5W
0236	K6VNX	559	CA	ARLEN	5W
0237	NN5E	559	TX	VERN	5W
0238	KQ5U	559	TX	TERRY	5W
0239	KT5V	559	TX	DAVID	5W
0240	N3ZPQ	559	OH	FRANK	4W
0242	K7TQ	559	ID	RANDY	5W
0243	K2ZN	559	NY	AL	5W
0243	N9KW	579	IL	JOHN	5W
0246	W9HL	559	IL	RANDY	5W

0247	N5YFC	559	LA	WAYNE	5W
0247	AC7A	559	AZ	TOM	5W
0249	K8KFJ	559	WV	GARY	5W
0250	K3ESE	599	MD	LLOYD	5W
0251	AC7AF	599	WY	BRIAN	5W
0252	KQ6RL	559	CA	DAVE	5W
0253	KN5L	559	TX	JOHN	5W
0254	WA5BDU	579	AR	NICK	5W
0256	VE4WI	579	MB	CRAIG	5W
0257	K2PQ	559	NJ	FRANK	5W
0258	W8RU	589	MI	RON	5W
0259	WB4X	559	NC	BRENT	5W
0300	K7HBN	579	WA	GEORGE	5W
0301	AA7EQ	559	AZ	BOB	5W
0302	K5MVR	559	TX	RON	5W
0303	N1FN	559	CO	ET	5W
0303	N7CQR	559	OR	RON	5W
0304	AF4LQ	579	KY	MIKE	5W
0305	KG6CYN	559	CA	TREV	5W
0307	KB9YIG	579	IN	TONY	2W
0308	W7ACM	599	WA	GREG	5W
0309	WB8YYY	559	MD	CURT	5W
0309	K4BYF	559	FL	JACK	3W
0311	KC1FB	559	CT	JIM	5W
0311	KG0PP	559	CO	JIM	5W
0313	K6XR	579	CA	REGGIE	5W
0314	K4GT	559	GA	JIM	5W
0316	AG4PJ	559	AL	DAVE	5W
0317	K9IS	559	WI	STEVE	5W
0318	AB9CA	559	AL	DAVE	5W
0319	W5USJ	559	TX	CHUCK	5W
0322	K8CV	559	MD	WALT	4W
0322	K5UV	559	OK	MIKE	5W
0323	WE9K	339	WI	GLENN	5W
0324	W8YMO	559	OH	HARRY	5W
0325	N1TP	559	FL	TOM	5W
0326	AJ4AY	559	AL	JAY	5W
0327	NV4V	559	KY	PETE	5W
0327	K8CV	559	MI	WALT	2W
0329	WA8BXN	559	OH	MIKE	5W

0330	K5DI	559	NM	KARL	5W
0332	KD5UDB	559	LA	CHRIS	5W
0334	KG4LDY	559	VA	JIM	5W
0335	KJ0C	559	MO	JIM	5W
0336	KB5FCF	559	OK	JOEL	3W
0337	K6IA	559	CA	WARD	5W
0343	W2LJ	339	NJ	LARRY	4W
0345	K8MIA	559	WV	JIM	5W
0347	W4NJK	549	CA	CHARLIE	5W
0351	NZ4E	559	VA	MARC	5W
0358	K01M	559	VA	MIKE	5W
0359	W9JOP	559	?	?	500MW
0400	W0IS			FOX	
0400	KR0U			FOX	

Date: Sat, 24 Jan 2004 01:23:33 -0800
 From: "Trevor Jacobs" <kg6cyn@softhome.net>
 To: Makos327@worldnet.att.net,
 "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
 Subject: [166144] Re: Congratulations, N8IE !!!
 Message-ID: <012e01c3e25b\$bd83d220\$38fea8c0@TREVORMAINPC>
 MIME-Version: 1.0
 Content-Type: text/plain;
 charset="iso-8859-1"
 Content-Transfer-Encoding: 7bit

Way to go Dan!!!

73's Trev - KG6CYN
<http://www.qsl.net/kg6cyn>
 ----- Original Message -----
 From: "Lawrence Makoski" <Makos327@worldnet.att.net>
 To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
 Sent: Friday, January 23, 2004 3:53 PM
 Subject: Congratulations, N8IE !!!

> If anyone posted this before, I apologize for my redundancy!
 >
 > I was leafing through my January issue of CQ while eating lunch today at
 > work. I came across the scores for the 2003 CQ WW WPX SSB Contest.
 >

> Dan, N8IE was the top QRP/p operator in the USA and finished in the top
> 10 worldwide !!!
>
> Way to go, Dan !!!
> 73 de Larry W2LJ - Vivat Morse!
>
> W2LJ@arrl.net
> <http://www.qsl.net/w2lj>
>
> ARRL Lifemember QRP ARCI #4488 NJQRP #47
> FISTS #1469 QRP-L #778 FP #612 QRPp-I #759
> ARS #1528 --- K1 #1647 --- AmQRP, CQC #746
>
>
>

Date: Sat, 24 Jan 2004 04:48:08 -0600
From: "Jim Sheldon" <w0eb@cox.net>
To: "QRP-L Mailing List" <qrp-l@Lehigh.EDU>
Subject: [166145] RE: THE K2 AND AIRPLANE BUFFS
Message-ID: <IBEGLCMLCDHHEFLBPHB00EKFDA000.w0eb@cox.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Never had much problems with flight instructors until well after I got my private license. I belonged to an Army flying club and they had a couple of Cessna L-19 "Bird Dogs" and for those of you out there that have flown this beast, it's a "Tail-Dragger" and somewhat squirrely on landing. The tail wheel has about 150 pounds of dead weight on it when sitting, the main gear is VERY springy and pretty long. The thing has a real big propellor that's subject to hitting the ground in a "Wheels" landing if you plant the mains too hard and compress the heck out of those big springs, I mean main gear legs. They're just a big strap of spring steel.

The instructor I had for this transition from tricycle gear to tail-draggers in one of the more difficult aircraft to master landings in, used to whack me on the head with a rolled up chart every time he even thought I was gonna screw something up. Good thing this plane still had the military communications intercom in it and we had to use the Army flight helmets, or I'd probably still have knots on my head, and all this happened over 30 years ago :-)

Jim, W0EB

-----Original Message-----

My primary instructor wasn't that polite. More like, "If you're going to forget everything I taught you and land like that..."

--
73,
Bruce
N7CEE

Date: Sat, 24 Jan 2004 06:51:32 -0500
From: "John J. McDonough" <wb8rcr@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Cc: <johnb@elmhurst.edu>
Subject: [166146] Re: Elmer 160: Lesson 7--Assignment 2
Message-ID: <001a01c3e270\$6aab4690\$090044c0@BrianBoru>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

John

If you notice, what you have is $4.9152 - 3.5 = 1.415200$ or 159820. your 169820 sounds as if you are forgetting to subtract the carry from the third byte.

```

    4b 00 00
-   35 67 e0
-----
    15 98 20
```

$100 - e0 = 20$, $(100 - 1)ff - 67 = 98$, $(4b - 1)4a - 35 = 15$

Hope this helps

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----
From: "John Bohnert" <johnb@elmhurst.edu>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Friday, January 23, 2004 2:13 PM
Subject: Elmer 160: Lesson 7--Assignment 2

> Homework Assignment #2.....
>
> I am working on two problems for the homework assignment...a desired
receive
> frequency of 21.0 MHZ and desired receive frequency of 3.5 MHZ.
>
> I set up my program as a four byte/32 bit subtraction problem. With
either
> of the two problems my program will always provide the correct answer for
> the two lower level bytes. However, with the 3.5 MHZ subtraction problem
> there is an error in the third (or highest level) byte required for an
> answer...desired answer H '159820'...my answer is H '169820.' The 21.0
MHZ
> subtraction problem is correct at the third level...H 'F56F40.' (I have
not
> played with a problem that would require the use of all four bytes for an
> answer).
>
> At issue is the status of the C bit throughout the subtraction (borrowing)
> process for each of the bytes. I can create a program that will generate
a
> correct answer for the desired listening frequency of 3.5 MHZ...but then
> there is an error in the 21.0 MHZ problem at the highest bit level...F4
> rather than F5. Some suggestions would be appreciated. Thanks.
>
> 72
> N9KW
> John
>
>
>
>

Date: Sat, 24 Jan 2004 07:00:08 -0500
From: "Alan Fryer" <N3BJ@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [166147] WTB: OHR Sprint 40M or 30M
Message-ID: <Law9-0E30WmaUYOLrQa0001bb2a@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Anyone on the list have a surplus OHR Sprint for 40 or 30M ? Other tunable DC RX type transceivers considered, also. Non-working OK if it is intact and in good physical condition.

Alan, N3BJ
Bent Mountain, VA

Date: Sat, 24 Jan 2004 07:23:47 -0500
From: "Ron Polityka" <wb3aal@verizon.net>
To: ".QRP-L" <qrp-l@Lehigh.EDU>
Subject: [166148] Spooky Atomic Clock
Message-ID: <001001c3e274\$eabdd920\$0200a8c0@WB3AAL>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello,

Check out this article by NASA.

http://science.nasa.gov/headlines/y2004/23jan_entangled.htm?list995387

72 and Thanks,
Ron Polityka
WB3AAL
www.n3epa.org/

Date: Sat, 24 Jan 2004 07:40:23 EST
From: Nightowls627@aol.com
To: qrp-l@Lehigh.EDU
Subject: [166149] rock mite 20
Message-ID: <163.2ae4f38c.2d43c1b7@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Thanks for all the responses. It does work. Now for the receive side. I am using my attic dipole through a manual tuner. Can I use a longwire tuned for freq instead? There is no static, well not what I am accustomed to. There is noise but not much. I am using a set of sony big stereo headphones.

73

G. Doughty
ki4bbl@arrl.net

Date: Sat, 24 Jan 2004 07:38:15 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: hamjoel@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [166150] Re: THE K2 AND AIRPLANE BUFFS
Message-ID: <40126737.5990A213@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Well now Joel, I didn't know you had added flying to your resume.
Flying a small plane can be a lot of fun if you always remember that you
are on final approach from the instant your wheels leave the ground!

What year/model is your Cessna 150? I used to own a 1967 "G" Model I
put a lot of time on that airplane. Flew all over the west with it.
Had it based at Van Nuys. Course it was the early 70's and flying was
not so expensive as to eliminate the common man. I only paid \$6,000 for
the airplane.

About flying, your instructor should have taught you about approach
speed and landings. You certainly want to land at the big end of the
runway, not the small end! And of course you don't want to land too
hot.

Now, about flying and operating a ham radio. I never flew with more
than a 2 meter HT, but I can imagine the problems when you're trailing a
300 foot wire, trying to see what frequency you're on, and avoiding
other objects. There's a good reason for avionics not requiring much
pilot attention! For your own safety's sake I would set an arbitrary
limit of 1000 feet above ground, below which everything is buttoned up
tight.

A funny, but true, story. There was once this young(ish) kid who had
satisfied all requirements to solo. On the appointed evening his
instructor hopped out of the plane at mid field saying "Make three
touch and go's and then bring t back".

The kid gunned the motor and went off to burn a dew holes in the
California smog/ While he was engaged in his solo effort some other

plane dropped a wad of burning paper out over the golf course at the departure end of the runway.

Now, not only is open fire a no-no in California, but it is a federal crime to toss anything out of an aircraft. Accordingly the FBI was called and they went about questioning everyone who was flying that night. When they got to my airplane they first questioned my instructor. Fortunately he cleared me by explaining that it was my first solo that night and he was certain that I was far too busy to be bombing a golf course!

I did meet the agent though. A very nice guy and a pilot and ham to boot!

Thanks for the memories...

Bruce

Date: Sat, 24 Jan 2004 13:15:00 GMT
From: ultrafixedwing@juno.com
To: qrp-l@Lehigh.EDU
Subject: [166151] Re: For CW Buffs
Message-ID: <20040124.051519.490.1065282@webmail25.nyc.unttd.com>
Mime-Version: 1.0
Content-Type: text/plain

I agree on the CW. My daughter, who is 35 now, learned CW and got her Novice at age 11. She then got her Extra at age 12. She was doing over 30 wpm at the time.
Paul
KS2S

The best thing to hit the internet in years - Juno SpeedBand!
Surf the web up to FIVE TIMES FASTER!
Only \$14.95/ month - visit www.juno.com to sign up today!

Date: Sat, 24 Jan 2004 08:02:16 -0000
From: "Doc - W5TB" <w5tb@arrl.net>
To: "Doug Hendricks" <ki6ds@dpol.net>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [166152] Re: American QRP Club announces Forum Schedule for 2004
Message-ID: <00a501c3e250\$7050a420\$0400a8c0@attbi.com>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thank you Doug! Putting together a show like HAMCOM year after year is quite a challenge and assistance from the American QRP club will be most appreciated :)

I encourage all QRPers to attend at least one of these great shows. Better yet contact the sponsors and volunteer to put on a program. Getting good speakers is always a challenge and it's your opportunity to bask in your 15 minutes of fame. You won't get rich but you will get the satisfaction which comes from giving back to the QRP community.

Thanks again Doug and all you American QRP members -- we hope to CU at HAMCOM In Arlington TX June 18 & 19 <http://www.hamcom.org/>

72, 73, oo T.E. 'Doc' Drake, W5TB
Arlington, Texas
FISTS # 5365 QRPARCI # 3532 ARRL Life Member K1 #181 K2#1617
<http://www.qsl.net/w5tb>

----- Original Message -----

From: "Doug Hendricks" <ki6ds@dpol.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Friday, January 23, 2004 7:53 PM
Subject: American QRP Club announces Forum Schedule for 2004

> The American QRP Club is pleased to announce that it will be co-sponsoring
> the following QRP Forums this year with the following local clubs:

>
> March 26-27 Atlanticon - NJQRP Club
> April 9-10 Ozarkcon - 4 States QRP Club
> June 18-19 Hamcom - NORTEX QRP Club
> July 3-4 Ft. Tuthill (At Williams, Az) - Az. ScQRPions
> July 10-11 Lobstercon - QRPme
> October 15-17 Pacificon - NorCal QRP Club

>
> One of the goals of the AmQRP club was to help provide support for QRP
> Forums in all areas of the country, so that qrxpers would have the
> opportunity to take advantage of attending one. We did not know how
quickly
> we could start this program, but it is going much faster than we
envisioned.
> We have a model for supporting and putting on QRP Forums, and one of the

key

> parts is funding with kits. You are supporting qrp when you buy kits from
> clubs, and the clubs could not put on these forums without your help. I
> hope to make as many of them as possible and look forward to meeting all
of
> you in person. Thanks again for your support.
>

Date: Sat, 24 Jan 2004 09:05:44 -0500
From: "Ken La Rose" <kenlar@csolve.net>
To: <qrp-1@Lehigh.EDU>, "QRP-Canada" <qrp-canada@neale.gpfn.sk.ca>
Cc: "Tom Hamblin" <hamblin@mirusinternational.com>,
"Tom Curtola" <tcurtola@rogers.com>,
Subject: [166153] Sunday Morning SSB/CW QRP Net
Message-ID: <001501c3e283\$29a22070\$c4618a3f@D1YQV721>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello Again!

Please join us if you can for another informal weekly QRP gathering on 40m
around 7.067MHz, at 10:00 AM local (ET), 1500 UTC tomorrow morning. Listen
for NCS VE3ELA on lower sideband, or break-in on CW/SSB if you hear a net
participant, and they will QSP. All Hams within hearing range are invited to
join us.

Last week we started at our new time (1500 UTC), and had an exceptional net!
Conditions were very good for QRP operations on 40m, resulting in a record
number of participants:

VE3KQN Jim, Pickering, ON
VE3TKF Terry, Gravenhurst, ON
VE3QF Tony, Scarborough, ON TS-950, 8w
VE3ICL Les, Restoule, ON SGC 2020, 5w
NA8M John, Grand Rapids, MI RST 579, 5w
VE3JC John, London, ON K2, inv.V
VE3RLX Ric, Brantford, ON
VE3RRQ Mike, nr Lindsay, ON FT-817, 1w!!
VE3OSC John (VA3JE), Ont. Science Ctr., Toronto, ON FT-847, 5w
VE3XT Bill, Thunder Bay, ON
VA3QF Keith, Ottawa, ON SSB/CW
W2APF Thaire nr Boston, MA KX1, 1w to Hy-Gain Hy-Tower 18HTS!!
WA1FXT Bob, Amherst, OH at bench designing & building gen coverage rcvr

VE3JEV Richard, London, ON
VE3REP Garry, Ajax, ON
VE3FUL Ted, Belleville, ON
VE3ELA Ken, NCS in Midland, ON

Hope everyone enjoyed it as much as I did. Looking forward to meeting y'all again tomorrow!

72,

de Ken VE3ELA

Date: Sat, 24 Jan 2004 09:08:46 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: crbink@sbcglobal.net, qrp-1@lehigh.edu
Subject: [166154] Re: Isotron Antennas
Message-ID: <40127C6E.E8D2BE2D@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have never used an Isotron but I have worked ONE. That was about 1976. I came home at Christmas, and brought along my TS520 for entertainment.

At first I was just going to listen, but after one evening the temptation was too great, I had to get on the air! I was staying at my mother's condo, a four story brick structure where we were on the third floor. Immediately the question became what to do about an antenna.

Reaching back into my 25 year history of being a ham ////i recalled stories of guys loading up the bed springs. Of course that would have been to much trouble. I was using a piece of #14 automotive wire for receiving. I had an antenna tuner. Why not, I reasoned, use it too transmit.

Much to my surprise, it loaded just fine on 40 and maybe on 80! This wire was laying on the floor of a third story condo! I proceeded to make some 20 or 30 QSO's to prove I wasn't dreaming. Amateur Radio had never been so easy!

My QSO's were up and down the east coast, and one of them was a W3 in southern Pennsylvania who was using an Isotron. I think he was running 100 watts (most everyone was, at that time but the interesting point was the antenna was mounted on a shore pole next to his operating desk, on the basement!

His signal was a solid 579. To say the least, I was impressed. But for you application you talk about using using an array of at least 5 antennas. Now, here's the rib, that's a lot of money for something you don't even even know works.

If I were you I would carefully investigate ONE antenna, and depending on your success I would decide about more. And, of course, I an't pass up a chance to plug my favorite antenna, the end fed wore. If you can see the garage roof from your operating position, you are in a position to try one. And the best part, besides I know they will work, is that over 100 of them can be erected for less than three bucks!

You can get further information on building and using end fed's, read my two articles in QST. The June 2002 article talks about my outdoor one, but the June 1995 article talks to a short, temporary, end fed that slopes slightly upward from the point of launch. Somewhere in these two you might find some help.

Bruce

Date: Sat, 24 Jan 2004 06:56:38 -0800 (PST)
From: Nelson Winter <thenels@go.com>
To: Nightowls627@aol.com,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [166155] Re: rock mite 20
Message-ID: <1453773.1074956199021.JavaMail.thenels@gomailjtp01>
Mime-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 7bit

Rock-Mites are very particular about SWR. If you use a long wire or any other non-resonant wire, be sure to use a tuner to make sure that the radio is seeing 50 ohms. The output PA (Q6) will blow up right away if the antenna is not well matched.

As far as not hearing anything goes, I suggest you download the "help" document from the smallwonderlabs.com website.

Here's the link to the help file:

<http://www.smallwonderlabs.com/RMhelps.pdf>

I suggest you perform some of the basic troubleshooting steps that are outlined in the text. 95% of the time, you will find the problem and fix it right away.

Most of the time, a problem is caused by putting the wrong part in the wrong place. So be sure to double and triple check every component to make sure you put them all in correctly. Also look for solder bridges or gaps as these too often cause trouble. You should use a magnifying glass if you can.

I hope this helps,

Nelson Winter
WB6DWD

-----Original Message-----

From: Nightowls627@aol.com

To: "Low Power Amateur Radio Discussion"<qrp-l@Lehigh.EDU>

Date: Sat Jan 24 04:40:23 PST 2004

Subject: rock mite 20

>

>Thanks for all the responses. It does work. Now for the receive side. I am
>using my attic dipole through a manual tuner. Can I use a longwire tuned for
>freq instead? There is no static, well not what I am accustomed to. There
>is noise but not much. I am using a set of sony big stereo headphones.

>

>73

>G. Doughty

>ki4bbl@arrl.net

Less = More

<http://www.qsl.net/wb6dwd/>

RM-40/30/20

QRP-L #2482

Check-out GO.com

GO get your free GO E-Mail account with expanded storage of 6 MB!

<http://mail.go.com>

Date: Sat, 24 Jan 2004 10:09:53 -0500
From: "Mark S. Adams" <msadams@buffalo.edu>
To: qrp-l@lehigh.edu
Subject: [166156] ARRL VHF Sweepstakes TODAY
Message-ID: <1074956993.40128ac13fc55@mail1.buffalo.edu>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 8bit

Hi Gang,

The must have details are:

January VHF Sweepstakes

January 24-26, 2004

2004 ARRL January VHF Sweepstakes Rules

Begins 1900 UTC Saturday, ends 0400 UTC Monday

Begins 2:00 PM EST Saturday - 11:00 PM Sunday

<http://www.arrl.org/contests/rules/2004/jan-vhf-ss.html>

2003 Results

<http://www.arrl.org/contests/results/2003/JanVHF.pdf>

I hope everyone has a chance to get on and make noise. This is a super fun even, one of my top 3 favorites for the year, and your local VHF/UHF/uW club will be appreciative of your efforts.

QRP NOTES: This contest has a QRP category called Single Op Portable. I have scored in the top 10 nationally in this category with nothing more than my FT817 and 3 homebrew yagis each costing about 5 BUX. Yes, \$5/ea. They can be seen at:

<http://www.fredspinner.com/W0FMS/CheapYagi/vjbcy.html>

Here are my cheap yagis for 144, 222 and 432 along with another 6M yagi made from old junk antennas:

<http://www.acsu.buffalo.edu/~msadams/RDV%20Photos/RDV%20in%20Jan%20SS%202003.jpg>

QRP FM: Another neat feature in January is the large amount of FM activity. If you live in an area with a VHF club, try the simplex freqs, 146.55, 146.58, 147.51 and 446.000 for activity. Note that some clubs use different sets of frequencies so check their websites to see

where everyone is hanging out. This is how we brainwash, I mean excite, newbies into the fold.

As for this contest, I will be QRP on 222 and 10GHz (5W and 2W respectively.) Other bands will have a bit more power as the rover category allows the legal limit. Once you try VHF+ stuff from a good location, you WILL be hooked. For me it was working W2SZ/1 on CW with a HB 8-el beam and 4W from WNY; a 275 mile path!

Lastly, check out the soapbox reports for previous VHF contests at ARRL. There is a HUGE amount of homebrewing, antenna construction and weak signal CW here. It is no wonder my two favorite radio pastimes are HF CW QRP and VHF-uW! Enjoy, and stay warm.

73,
Mark

Mark S. Adams, K2QO
Secretary, Rochester VHF Group
www.rvhfg.com

Date: Sat, 24 Jan 2004 10:15:36 -0500
From: "Paul J Mackanos, Jr." <paul@prohomeinspector.net>
To: <qrp-l@Lehigh.EDU>
Subject: [166157] AZScQRPions Paddles # 451
Message-ID: <PNEKINNJBIMILABIMJBGAIEIHCKAA.paul@prohomeinspector.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I just received it, and am warming up the car (its 8 degrees) to run up to home depot for the supplies, question, is 400 grit the finest I should use, or go smaller ? I want it to really shine, but don't have a Dremel tool.
72 de Paul

Date: Sat, 24 Jan 2004 10:16:36 -0500
From: "Ron Polityka" <wb3aal@verizon.net>
To: ".QRP-L" <qrp-l@Lehigh.EDU>
Subject: [166158] Re: Possible AT in PA on Saturday
Message-ID: <005101c3e28d\$0f661400\$0200a8c0@WB3AAL>
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello,

I am heading out to the AT around 15:30 UTC. It might take me about an hour to get there but I should be on the air around 16:30 to 17:00 UTC.

Look for me on 14.060 to .063. If the band is not too good look for me on 10.106 to .109. I will try 7.040 to .043 at the end near 18:00 UTC.

If you give me a call, Please give me a few seconds to reply. It is going to be cold. :-) I am not sure how long I will be on the air just because I will not have a tent for shelter, I will be out in the open. I will take pictures. If you see this e-mail, just let me know. That way I can tell you if I plan to stay longer for more QSO's, then if you can please make a post about my intentions.

72 and Thanks,
Ron Polityka
WB3AAL
www.n3epa.org/

----- Original Message -----

From: "Ron Polityka" <wb3aal@verizon.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Friday, January 23, 2004 11:43 PM
Subject: Possible AT in PA on Saturday

> Hello,
>
> On Saturday around 16:00 or 17:00 UTC I might be out on the Appalachian
> Trail with my K1. This all depends on what kind or how much of a snow fall
> we receive tonight. The high temperature might only be in the mid 20's
> with
> 10 to 15 MPH winds. The wind chill could be 2°F and -6°F depending on the
> wind. This will be a good test for cold wx and the K1. I plan on keeping
> the
> batteries in my jacket so the cold does not kill the power too quick. I
> might be able to use my snow shoes for once. :-) I will post my finally
> plans around 15:00 UTC. I am using this for my FYBO testing session. If
> all
> works out as planned I will be out for the FYBO contest next month, that
> is
> if the temp stays down below freezing.
>
> 72 and Thanks,

> Ron Polityka
> WB3AAL
> www.n3epa.org/
>
>
>

Date: Sat, 24 Jan 2004 10:17:26 -0500
From: "Paul J Mackanos, Jr." <paul@prohomeinspector.net>
To: <qrp-1@Lehigh.EDU>
Subject: [166159] Atomic Clock
Message-ID: <PNEKINNJBIMILABIMJBGAMEIHCXAA.paul@prohomeinspector.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have recently purchased a SkyScan Model 86722ALU, and have been reading about locking. Apparently mine has locked, as the icon is always on. What exactly does lock mean ??
72 de Paul K2DB

Date: Sat, 24 Jan 2004 10:25:31 -0500 (Eastern Standard Time)
From: "Mike WA8BXN" <hubby2k@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>,
 <paul@prohomeinspector.net>
Subject: [166160] Re: AZScQRPions Paddles # 451
Message-ID: <40128E6B.000001.03840@compaq1500>
MIME-Version: 1.0
Content-Type: Text/Plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

You should probably go to at least 1000, I used 2000 as my final sanding, available at auto supply place if not the home depot. Dremel tool not really needed.

73/72 - Mike WA8BXN

Date: Sat, 24 Jan 2004 10:28:16 -0500
From: "JBCrafts" <jbcraft@adelphia.net>
To: <paul@prohomeinspector.net>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [166161] RE: AZScQRPions Paddles # 451
Message-ID: <AGEJJBFLLHMOECFDINOEEPGELAA.jbcraft@adelphia.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

jeweler's rouge and a chamois... and LOTS OF TIME... and you will have a mirror finish.

Bob K8YS

Date: Sat, 24 Jan 2004 09:28:41 -0600
From: John Oppenheimer <john@KN5L.net>
To: unlisted-recipients;; (no To-header on input)
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [166162] Re: Atomic Clock
Message-ID: <40128F29.EAF10BDE@KN5L.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

My assumption that "locked" means that the clock has received WWVB and has synchronized with the time code received from WWVB. There is probably some period of time, days, that if the signal is not received, the "locked" indication will turn off.

Days, because in most parts of the country there is propagation for the 60 kHz WWVB signal only during the nighttime hours. See <http://www.boulder.nist.gov/timefreq/stations/wwvb.htm> for more information.

John

"Paul J Mackanos, Jr." wrote:

>
> I have recently purchased a SkyScan Model 86722ALU, and have been reading
> about locking. Apparently mine has locked, as the icon is always on. What
> exactly does lock mean ??
> 72 de Paul K2DB

Date: Sat, 24 Jan 2004 09:56:59 -0600
From: "Dave @ Interaccess.com" <dleonard@interaccess.com>
To: <n2apb@clearviewcatv.net>,
 "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [166163] RE: AmQRP "PIC-EL Kits" ship today!
Message-ID: <000301c3e292\$b37e7e60\$6501a8c0@DHPDR331>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

George and the Team!

Job well Done! Kudos to all involved! 315 orders? I guess we all want in on the "action" ;-)

The Elmer course is going well and I am chomping at the bit to play with the new toys (I already have the DDS Daughtercard).

Thanks! Et 72 de Dave K9FZJ

Date: Sat, 24 Jan 2004 10:11:39 -0600
From: John Oppenheimer <john@KN5L.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [166164] WWVB, history of
Message-ID: <4012993B.79192B4D@KN5L.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

There is a rather short WWVB history at the history link at
<http://www.boulder.nist.gov/timefreq/stations/wwvb.htm>

But an interesting read is
<http://www.boulder.nist.gov/timefreq/general/pdf/1406.pdf> found in the station library link.

John

Date: Sat, 24 Jan 2004 08:24:18 -0800
From: Steve Smith <sigcom@juno.com>
To: qrp-1@Lehigh.EDU
Subject: [166165] Re: For CW Buffs
Message-ID: <20040124.082419.3692.2.sigcom@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Quite an accomplishment at such a young age. But but I would imagine that Jason's not such a "little guy" these days as he's almost 21 years old.

His web page hasn't been updated for almost 5 years. Hope everything is well with him.

73.....Steve Smith, WB6TNL
Oxnard, CA USA
"Snort Rosin"

On Fri, 23 Jan 2004 15:59:59 -0800 "Lee Hopper" <leehopp@msn.com> writes:

> Great site - thanks for posting it, John. Here's a short quote from
> Jason:

>

> ..I started getting QSL cards! I had never received mail of any
> kind, other
> than an occasional birthday card and those little postcards the
> dentists
> send out to you reminding you to brush your teeth. It was very
> exiting for
> me.

>

> :)

>

> 73 -

> Lee Hopper, NB7F

>

> n3drk wrote in part:

> > ...Look what this little guy has done...

>

>

The best thing to hit the internet in years - Juno SpeedBand!
Surf the web up to FIVE TIMES FASTER!
Only \$14.95/ month - visit www.juno.com to sign up today!

Date: Sat, 24 Jan 2004 11:59:00 -0500
From: <bill@n4qa.com>
To: <qrp-1@Lehigh.EDU>
Subject: [166166] Re: For CW Buffs
Message-ID: <000d01c3e29b\$5e809840\$0526ad80@f1n5n8>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Jason, on one of his webpages, noted that N5NU was his first choice for a
vanity call back in '97.
I'll bet if someone had asked Jason "What's NU ?", he would have answered:
"C over Lambda" :0)

73.
Bill, N4QA
<http://www.n4qa.com>

Date: Sat, 24 Jan 2004 12:01:53 -0500
From: John Sielke <jsielke@pobox.com>
To: qrp-1@lehigh.edu
Subject: [166167] Re: For CW Buffs
Message-ID: <4012A501.4090003@pobox.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

> His web page hasn't been updated for almost 5 years. Hope everything is
> well with him.

Probably discovered girls.

John W2AGN

Date: Sat, 24 Jan 2004 12:15:35 -0500
From: "AD4MZ Bob C" <ellyncooley@earthlink.net>
To: <qrp-1@lehigh.edu>
Subject: [166168] Trade: Sierra for a KX1
Message-ID: <000901c3e29d\$aeca4420\$d3c63841@system2002>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Short on time for building and really want to try the KX1 by Elecraft. Have a very nice looking and working Sierra by Wilderness Radio. Includes band modules for 80,40,30,20,17, and 15meters. Includes options such as the Kc2 keyer/counter/smeter/wattmeter, and the BuzzNot Noise Blanker. Rig works great. Best DX worked with this rig was Mongolia on 500mw from SC.

If interested in a possible trade email here or use email listed in QRZ for AD4MZ.

72

Bob

Date: Sat, 24 Jan 2004 12:48:23 -0500
From: "E. Roswell" <eroswell@monmouth.com>
To: qrp-1@Lehigh.EDU
Subject: [166169] Re: AZScQRPions Paddles # 451
Message-ID: <4012AFE7.40305@monmouth.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

I used a 320 grit disc on my power sander, then succeeding papers of 600, 800, and then 1500 grit. Found the papers at the second auto parts store I went to. Then I used Flitz polish with a Dremel tool buffing wheel for the final finish. This stuff comes in tubes of varying size like toothpaste. Hmmm, wonder if a "high polish" type toothpaste would work nearly as well.....
Ed, K2MGM.

Date: Sat, 24 Jan 2004 13:45:31 -0500
From: PMdc361@aol.com
To: qrp-1@lehigh.edu
Subject: [166170] Iraq on the air!!!
Message-ID: <6A75AEE5.3D9712A2.0017E976@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8bit

KE4RVT is on the air in Iraq as YI9RVT. Will be on the air from 1830 utc until my eyes fall out. Will be working qrp 20 meters around 14060+/- . Hope to catch you guys.

--

Dwayne KE4RVT/YI9RVT
FPQRP #85
QRP-L #2201
KX1 S/N 0337

Sometimes a little brain damage can help. (George Carlin)

Date: Sat, 24 Jan 2004 13:52:14 -0500
From: "John Harper AE5X" <john@ae5x.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [166171] Re: For CW Buffs
Message-ID: <000301c3e2ab\$2efddd20\$6401a8c0@JOHN>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

And the guy makes the best of an embarrassing situation:
<http://home.inu.net/n5nu/ylfactor.htm>

You da man, Jason!

John Harper AE5X
Outdoor QRP & 80-Meter DXing: <http://www.ae5x.com>

Date: Sat, 24 Jan 2004 14:28:48 -0500
From: Al Scanandoah <k2zn@rochester.rr.com>
To: qrp-l@lehigh.edu
Subject: [166172] Need help w/ paddle ID
Message-ID: <4012C770.8060109@rochester.rr.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Hi

I recently obtained a single lever paddle, but it has no label,

engraving, or any other type of identifying marks. Does someone know what this is?

<http://home.rockchester.rr.com/k2zn/pix/paddle1.jpg>
<http://home.rockchester.rr.com/k2zn/pix/paddle2.jpg>

Yeah, I know the photos are lousy...

72 & Tnx - Al, K2ZN

Date: Sat, 24 Jan 2004 13:30:11 -0600
From: "rattray" <rattray@accesscomm.ca>
To: "QRP-C" <qrp-canada@neale.gpfn.sk.ca>, "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [166173] Fox - Fox Hunt Team Results.
Message-ID: <000001c3e2b0\$7f13a060\$7900a8c0@Bonnie>
MIME-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hunt # 25 - KR0U -

QRP Cheeseheads - 90

Jerry - N9AW *
Rick - NK9G * Clean
Gary - W9XT * Sweep
Lon - W9XU *
Jim - WA9TZE *

Cajun Thunder - 79

Wayne - K5EOA *
Wayne - N5YFC *
Vern - AA50 *
Jim - N5IB
Chris - KD5UDB *

The Underdogs - 82

Dan - N4ROA *
Dennis - N4DD *
Bob - KB2FEL
Dave - W0CH *
Ron - KI0II

Team Air Pork - 54

Wayne - K9DI
Mike - KD5KXF
Dave - AG4PJ *
Randy - W9HL *
Jerry - N0JRN *

Raiders of the Lost RF - 44

Rob - VE6JAZ *
Craig - VE4WI *
Fred - VE3FAL
Earl - VA6RF *

The NE-TX Tornados - 99

Bill - K5JHP *
Don - K5DW
Doc - W5TB *
Lew - N5ZE *

Bruce - VE5RC *

George -W5YR *

...please e-mail me direct with corrections, changes...tnx....

...72/73 - Bruce (VE5RC+VE5QRP) QRP-C#1 QRP-L#886 ARCI#9683 Zombie#272
A-1 Operator Club - 10/10# 944 - QRP Borg#1 - Whiner#10 -
- VE5QRP SOC#11 - VE5RC SOC#12 - oo#148 - K2#2032 - COG#15 -
"QRP! How sweet it is!" "I am da man wit "DAH" paddle!"

Date: Sat, 24 Jan 2004 14:32:13 -0500
From: "Emmersome Bigguns" <n8ie@woh.rr.com>
To: <PMdc361@aol.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [166174] RE: Iraq on the air!!!
Message-ID: <MMEDLKDLONJOAIGICDJAIEGPFCAA.n8ie@woh.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Not hearing you in SW Ohio, but will keep the ears pointed that way!

72, oo
Dan, N8IE

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of
PMdc361@aol.com
Sent: Saturday, January 24, 2004 1:46 PM

To: Low Power Amateur Radio Discussion
Subject: Iraq on the air!!!

KE4RVT is on the air in Iraq as YI9RVT. Will be on the air from 1830 utc until my eyes fall out. Will be working qrp 20 meters around 14060+/- . Hope to catch you guys.

--

Dwayne KE4RVT/YI9RVT
FPQRP #85
QRP-L #2201
KX1 S/N 0337

Sometimes a little brain damage can help. (George Carlin)

Incoming mail is certified Virus Free.
Checked by AVG anti-virus system (<http://www.grisoft.com>).
Version: 6.0.566 / Virus Database: 357 - Release Date: 1/22/2004

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (<http://www.grisoft.com>).
Version: 6.0.566 / Virus Database: 357 - Release Date: 1/22/2004

Date: Sat, 24 Jan 2004 13:23:40 -0700 (MST)
From: Karl Larsen <k5di@zianet.com>
To: PMdc361@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [166175] Re: Iraq on the air!!!
Message-ID: <Pine.LNX.4.44.0401241321160.5304-100000@bucket.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 24 Jan 2004 PMdc361@aol.com wrote:

> KE4RVT is on the air in Iraq as YI9RVT. Will be on the air from 1830 utc until my eyes fall out. Will be working qrp 20 meters around 14060+/- . Hope to catch you guys.

>

Here in NM there are a LOT of stations on and around 14.060.
Thought I heard what might have been you but think it was a weak fist guy. Not hearing YI9RVT yet at 2010UTC.

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

Date: Sat, 24 Jan 2004 15:09:59 -0500
From: "Alan Fryer" <N3BJ@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [166176] Wanted: W7EL Optimized Transceiver
Message-ID: <Law9-0E17F2a9jE11oj0001d75d@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Anyone have one of these - homebrew or board kit version or ?? - that is surplus ? Getting into DC transceivers a bit and would like to play with one. Working, non-working, partially built OK. Understand the OHR Sprint is based on this design. Have QRP stuff to trade or outright purchase OK.

Thanks,

Alan, N3BJ
Bent Mountain, VA

Date: Sat, 24 Jan 2004 15:21:30 -0500 (EST)
From: <ah7i@atl.org>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [166177] Have a SDR1000 you don't want anymore?
Message-ID: <Pine.LNX.4.33.0401241520110.30790-100000@localhost.localdomain>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I would like to mess around with one of these but am short on cash.
Ten-Tec Argonaut offered as partial swap.
-bob

Date: Sat, 24 Jan 2004 15:22:46 -0500 (EST)
From: <ah7i@atl.org>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [166178] Re: Have a SDR1000 you don't want anymore?
Message-ID: <Pine.LNX.4.33.0401241521440.30790-100000@localhost.localdomain>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Whoops.
Forgot the many argonaut flavors.
This is the little guy with the wood tone cabinet and slide rule dial.
509?

On Sat, 24 Jan 2004 ah7i@localhost.localdomain wrote:

> I would like to mess around with one of these but am short on cash.
> Ten-Tec Argonaut offered as partial swap.
> -bob
>
>
>

Date: Sat, 24 Jan 2004 12:41:10 -0800
From: "Rich Johnson" <rjohnson390@comcast.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [166179] IF amp xtal filters
Message-ID: <000a01c3e2ba\$667ba700\$2605ab43@END0EB86CD98A1>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have a question.

Many times you see designs with a 4-xtal I/F filter followed by an I/F amp followed by a single xtal filter.

I understand the idea that the xtal after the I/F amp is to filter out noise introduced by the amp however:

- 1) Would it be better to use a wide roofing type filter after the I/F amp or
- 2) Split the 4-xtal filter into two 3-xtal filters, one before the amp and one after or
- 3) Would a single tuned circuit after the amp be just as good as the single xtal filter.

What do people think of the trade offs between filtering before and after the I/F amp?

cheers,
rich

Date: Sat, 24 Jan 2004 15:51:26 -0500
From: Ed Tanton <n4xy@earthlink.net>
To: rjohnson390@comcast.net, QRP-L <qrp-l@lehigh.edu>, noga <nogaqrp@mailman.qth.net>
Subject: [166180] Re: IF amp xtal filters
Message-ID: <6.0.1.1.2.20040124154649.01d5f108@pop.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I hope you'll either post a summary of what you learn about this, Rich. I'd be very interested to hear what the knowledgeable folks around here have to say in answer to these very good questions.

P.S. Thought it would be better to repeat the entire question in this case-get people thinking about ALL the answers.

At 03:41 PM 1/24/2004, you wrote:

>I have a question.
>
>Many times you see designs with a 4-xtal I/F filter followed by an I/F amp
>followed by a single xtal filter.
>
>I understand the idea that the xtal after the I/F amp is to filter out noise
>introduced by the amp however:
>
>1) Would it be better to use a wide roofing type filter after the I/F amp or
>2) Split the 4-xtal filter into two 3-xtal filters, one before the amp and
>one after or
>3) Would a single tuned circuit after the amp be just as good as the single
>xtal filter.
>
>What do people think of the trade offs between filtering before and after
>the I/F amp?
>
>
>cheers,

>rich

72/73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

"He that gives up a little liberty to gain
temporary security will lose both and
deserve neither".
--Benjamin Franklin

"Suppose you were an idiot ...
and suppose you were a member of
Congress... but I repeat myself."
--Mark Twain

Date: Sat, 24 Jan 2004 16:11:44 -0500
From: "Tim Kass" <timkass@hotmail.com>
To: qrp-l@Lehigh.EDU
Subject: [166181] WTB: Red Hot 20 or 40
Message-ID: <BAY2-F152uS2GPBe0FM0001e6af@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Looking for a Red Hot 20 or 40 for my daughter, KC8YTH, trying to keep her
interest in the code since she got her license last December. 72/73 Tim
K8WBL

Rethink your business approach for the new year with the helpful tips here.
<http://special.msn.com/bcentral/prep04.armx>

Date: Sat, 24 Jan 2004 16:12:42 -0500
From: "AI2Q" <ai2q@adelphia.net>
To: "QRP-L \ (E-mail\)" <qrp-l@Lehigh.EDU>
Subject: [166182] Completed SSB rig pix
Message-ID: <001301c3e2be\$ce468ea0\$6401a8c0@agstme.adelphia.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I've posted completed SSB rig pix and schematics, of anyone's interested.
Comments and suggestions always welcome.

Having a ball with this rig on 75 fone!

Vy 73, AI2Q, Alex in Kennebunk, Maine QRP-L #687
<http://users.adelphia.net/~alexmm/ai2q.htm>

.-.-.

Date: Sat, 24 Jan 2004 14:17:32 -0700
From: "James R. Duffey" <JamesDuffey@comcast.net>
To: <rjohnson390@comcast.net>
Cc: QRP-L <qrp-l@lehigh.edu>
Subject: [166183] Re: IF amp xtal filters
Message-ID: <BC382EFB.11636%JamesDuffey@comcast.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

In general, it is best to have selectivity as early in the receiver as possible. Hence the 4 crystal filter before the IF amplifier is to be preferred over the 3 crystal before 3 crystal after configuration. And narrow IF filters are to be preferred over wide roofing filters. The more strong signals that that are filtered out before reaching stages with gain, the better the strong signal handling capacity of the receiver.

A single tuned circuit is usually pretty wide at megahertz IF frequencies and would be much wider than the single crystal filter.

The single crystal filter following the IF amp is usually satisfactory to

filter out the noise added by the IF amp. - Dr. Megacycle KK6MC/5

James R. Duffey KK6MC/5
Cedar Crest NM 87008 DM65

Date: Sat, 24 Jan 2004 16:33:33 -0500
From: John Sielke <jsielke@pobox.com>
To: qrp-l@lehigh.edu
Subject: [166184] CQ WW 160M
Message-ID: <4012E4AD.2070903@pobox.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Played around a bit last night, looking for my elusive 1000MPW on 160.
Got up at about 3AM, but most stations heard still fairly close. Worked
MO and NC with 500mw, which makes it as 1000MPW, but would still like to
do better. I heard K6XX CQing with a good 579, but he couldn't copy me
at 1W.

Will try again tonight. Last night I tied the feeders of the big loop
together and fed it as an inverted L. Tonight I'll try opening the far
side, and feed it as a 160M dipole.

John W2AGN

Date: Sat, 24 Jan 2004 16:35:37 -0500
From: Peter Burbank <peterlee@qx.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [166185] Re: Need help w/ paddle ID
Message-ID: <5.2.0.9.0.20040124161957.00a48680@mail.qx.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 02:28 PM 1/24/2004, Al Scanandoah wrote:

>Hi

>

>I recently obtained a single lever paddle, but it has no label, engraving,
>or any other type of identifying marks. Does someone know what this is?

>

><http://home.rochester.rr.com/k2zn/pix/paddle1.jpg>

><http://home.rochester.rr.com/k2zn/pix/paddle2.jpg>

>
>Yeah, I know the photos are lousy...
>
>72 & Tnx - Al, K2ZN

Al, Looks like (from the mechanism) the mfg'r also made bugs. I looked in W1TP's book and it is not in there. Most bug yokes pictured are curved on top, one exception being a Vibroplex Junior made in the '20s.

The book does list Tom W1TP's e-mail addr <http://w1tp.com>

73

Pete NV4V

Date: Sat, 24 Jan 2004 16:25:34 -0600
From: "Tony Martin W4FOA" <w4foa@comcast.net>
To: <k2zn@rochester.rr.com>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [166186] Re: Need help w/ paddle ID
Message-ID: <00d201c3e2c8\$fc5aede0\$6401a8c0@Delldude>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Al,
I can't be sure, but it looks very similar to a paddle I owned back in the early-mid 60's. If my memory is not too far gone, I believe it was made by "Poucel" and I want to say it was called an "El Key or L Key" but that may be totally incorrect. I want to say Poucel was a W2 or W3 lander.

My paddle was an enamel/shiny black base with good chrome work on the mechanism. I believe the three terminal posts were different from any other I had/have seen. There was a "floating" piece that meshed with the hookup wires as you tightened down the "nut".

The original "Poucel" label was enameled with red/white and blue in the design and I believe it was "glued" on the base. As I recall it was a well made paddle, but not terribly smooth when compared to today's models.

That is the best I can do Al, maybe others can provide more info and/or correct my inaccuracies.

73

Tony, W4FOA

----- Original Message -----

From: "Al Scanandoah" <k2zn@rochester.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Saturday, January 24, 2004 1:28 PM
Subject: Need help w/ paddle ID

> Hi
>
> I recently obtained a single lever paddle, but it has no label,
> engraving, or any other type of identifying marks. Does someone know
> what this is?
>
> <http://home.rochester.rr.com/k2zn/pix/paddle1.jpg>
> <http://home.rochester.rr.com/k2zn/pix/paddle2.jpg>
>
> Yeah, I know the photos are lousy...
>
> 72 & Tnx - Al, K2ZN
>

Date: Sat, 24 Jan 2004 16:33:17 -0600
From: "George, W5YR" <w5yr@att.net>
To: <rjohnson390@comcast.net>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [166187] Re: IF amp xtal filters
Message-ID: <021d01c3e2ca\$12ea4500\$0401a8c0@PS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Rich, you are delving into a fairly complex issue: distribution of gain and selectivity in a multistage receiver. A very good reference on this is Wes Hayward's "Introduction to RF Design."

But the basic concepts are just that: basic.

Reduce the bandwidth and control the signal amplitudes prior to the active stages which have a finite signal-handling capability.

That means that any mixer or amplifier can be driven into its non-linear operating range by high enough amplitude signals. So, one must ensure that

signal amplitudes are within the linear operating range of the first active device. This is done in two ways:

- a. use filters to reduce the bandwidth of the preceding circuitry feeding the active device to only that required for the desired signal; this keeps unwanted high-amplitude signals from affecting operation..
- b. control signal amplitudes by AGC as needed

Thus, we commonly see relatively wide filters used ahead of the r-f amplifier and/or first or only mixer stage to reduce the likelihood that strong signals can reach the mixer and overdrive it to produce spurious signals (IMD).

In the early stages of the receiver before the conversion to IF, these filters are commonly called roofing filters. They serve the added purpose of minimizing the response of the receiver to so-called image signals to which the receiver is prone to receive as a result of the mixer operation.

Once the signal has been converted to IF, gain must be used to make up for the loss in the mixer. So here again are one or more stages vulnerable to being overdriven and creating distortion products. So their signal levels have to be controlled closely by appropriate AGC circuitry.

It is usual practice to set the operating bandwidth of the receiver by one or more filters operating at the IF. Once sufficient amplification has been obtained, the signal is applied to the main IF filter. Again, one must be careful not to drive the filter too hard, if it is a conventional crystal filter, since these too have a signal range beyond which they do not perform as desired.

The filter will introduce loss which must be again be made up for by amplifier stages and again these must have their signal amplitudes controlled to prevent overdriving. Since the signal levels are now rather large compared to those at the mixer input, amplifiers capable of handling large signals must be used.

Any amplifier stage will generate noise in addition to increasing signal level. It is the usual practice to follow the IF amplifier(s) with yet another filter to limit the signal- and the noise-bandwidth of the receiver. Note that the filter does nothing to the noise except limit its power through limiting the bandwidth. IT does not "filter out the noise" and leave the signal.

This filter usually is not as complex as the main IF filter nearer the mixer output. That is, it may not have as small a shape factor or be as narrow in bandwidth as the main filter. On the other hand, the filter may indeed have a smaller bandwidth in order to further reduce the operating bandwidth of

the receiver. For example, the early IF filter may be a 500 Hz filter followed later by a 250 Hz filter for added CW selectivity.

All these remarks concerning filters apply to conventional receivers with crystal filters. In DSP IF receivers, such as the Icom PRO series or the ORION and other recent radios, the stages preceding the analog/digital converter (ADC) stage are operated and controlled so as to ensure that the ADC cannot be driven into saturation (maximum digital count). No particular effort is made to secure a narrow operating bandwidth in the preceding stages since the DSP filtering will accomplish this much better than any feasible crystal filter(s) can.

This is a very complex topic and I have not done much to reduce the complexity in trying to give you some idea of how to answer your questions. Like most questions in engineering, the answer is "it depends." Many factors bear upon how a receiver is designed, some posed by the user requirements, some by the characteristics of the devices used and some by the laws of Nature.

Finally, for a look at a most elegant receiver design examine the circuitry of the Elecraft K2. Its seemingly oversimplified circuit manages with very few parts and a very simple architecture to provide performance surpassing that of much more complex and expensive radios. You will find there a fairly complex crystal IF filter following the post-mixer amplifier and feeding the IF amplifier which then feeds a very simple crystal filter to the final mixer stage which produces the audio output signal.

Again, Wes Hayward's book and his new one "Experimental Methods in RF Design" are outstanding and I highly recommend their study.

Hope this helps a bit . . .

73, George W5YR
w5yr@att.net

----- Original Message -----

From: "Rich Johnson" <rjohnson390@comcast.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Saturday, January 24, 2004 2:41 PM

Subject: IF amp xtal filters

> I have a question.

>
> Many times you see designs with a 4-xtal I/F filter followed by an I/F amp
> followed by a single xtal filter.
>
> I understand the idea that the xtal after the I/F amp is to filter out
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> introduced by the amp however:
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> 1) Would it be better to use a wide roofing type filter after the I/F amp
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> 2) Split the 4-xtal filter into two 3-xtal filters, one before the amp and
> one after or
> 3) Would a single tuned circuit after the amp be just as good as the
single
> xtal filter.
>
> What do people think of the trade offs between filtering before and after
> the I/F amp?
>
>
> cheers,
> rich
>
>

Date: Sat, 24 Jan 2004 15:04:36 -0800
From: "Dave Martin" <k2zu@seanet.com>
To: "qrp-l" <qrp-l@Lehigh.EDU>
Subject: [166188] Re: Isotron Antennas
Message-ID: <000301c3e2ce\$70c67320\$238c2640@davemartin>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello Bink. I have never used nor worked an Isotron so I can't comment on them but I do agree with Bruce on the end fed wire. If you use the right length you can load the wire on most or all the HF bands and they really are cheap. I'm using one about 137 feet long and can load it up with my K1(with internal auto tuner) and with a ZM-2. Haven't tried 160 yet but 80 thru 10 work fine. Do find that I need a ground wire on 15m but any length over 20 feet seems to work fine. 73.
Dave K2ZU

Date: Sat, 24 Jan 2004 15:35:21 -0800 (PST)
From: Jeff <fantbb@yahoo.com>
To: qrp qrp <qrp-l@lehigh.edu>
Subject: [166189] For Sale LDG QRP tuner
Message-ID: <20040124233521.789.qmail@web20413.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

LDG QRP Tuner for sale. Works great and is really fast.

Best offer!

Jeff

=====
AB6MB
NorCal QRP Club #65, QRP-L #1780, ARCI 10071
Radical FIST Member 6798, Fanatic A's fan #1

End of QRP-L Digest 3175

